NAVAL POSTGRADUATE SCHOOL
MONTEREY, CALIFORNIA

THESIS

THE NATIONAL INTEREST, PRODUCTION, AND TRADE IN EL SALVADOR

by

Edgard F. Tovar

June, 1996

Thesis Advisors: Robert E. Looney
William R. Gates

Approved for public release; distribution is unlimited.

Thesis
T7627

DUDLEY KNOX LIBRARY
NAVAL POSTGRADUATE SCHOOL
MONTEREY CA 93943-5101

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the date needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY *(Leave Blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	June, 1996	Master's Thesis

4. TITLE AND SUBTITLE
THE NATIONAL INTEREST, PRODUCTION, AND TRADE IN EL SALVADOR

5. FUNDING NUMBERS

6. AUTHOR(S)
Tovar, Edgard F.

7. PERFORMING ORGANIZATION NAMES(S) AND ADDRESS(ES)
Naval Postgraduate School
Monterey, CA 93943-5000

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES
The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the US Government.

12a. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution is unlimited.

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

The objective of this thesis is to develop an analysis of El Salvador's economy using available statistical data.

First, an examination is made of El Salvador's democratization process in a historical perspective. Second, an analysis is undertaken of the country's policy through historical budget allocations. Third, an assessment is made of the economic standing point of El Salvador. This discussion embraces the production sectors, to determine their strengths and weaknesses from the resources efficiency point of view. Fourth, the study analyzes the implications of El Salvador's increasing trade deficit from the efficiency and equity perspectives. Fifth, a presentation is made of the economic strengths, weaknesses, threats and opportunities of the country from the short and long run perspective.

Finally, conclusions are drawn and recommendations made which could be utilized to improve El Salvador's economic future.

14. SUBJECT TERMS
El Salvador, Economic Analysis, Trade Deficit

15. NUMBER OF PAGES
116

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	UL

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. Z39-18
298-102

Approved for public release; distribution is unlimited.

THE NATIONAL INTEREST, PRODUCTION, AND TRADE IN EL SALVADOR

Edgard F. Tovar
Major, Salvadoran Army
BS, Chilean Military Politechnic Academy, 1981

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN RESOURCE PLANNING AND MANAGEMENT FOR INTERNATIONAL DEFENSE

from the

NAVAL POSTGRADUATE SCHOOL
June, 1996

DUDLEY KNOX LIBRARY
NAVAL POSTGRADUATE SCHOOL
MONTEREY CA 93943-5101

ABSTRACT

The objective of this thesis is to develop an analysis of El Salvador's economy using available statistical data.

First, an examination is made of El Salvador's democratization process in a historical perspective. Second, an analysis is undertaken of the country's policy through historical budget allocations. Third, an assessment is made of the economic standing point of El Salvador. This discussion embraces the production sectors, to determine their strengths and weaknesses from the resources efficiency point of view. Fourth, the study analyzes the implications of El Salvador's increasing trade deficit from the efficiency and equity perspectives. Fifth, a presentation is made of the economic strengths, weaknesses, threats and opportunities of the country from the short and long run perspective.

Finally, conclusions are drawn and recommendations made which could be utilized to improve El Salvador's economic future.

TABLE OF CONTENTS

I. INTRODUCTION 1

II. THE SALVADORAN DEMOCRATIZATION PROCESS 5

A. ORIGINS OF THE SOCIO-POLITICAL STRUCTURE 5

B. THE AUTHORITARIAN REGIME 6

C. THE BEGINNING OF THE END OF AUTHORITARIANISM 9

D. THE CHAOS OF THE POWER VACUUM 10

E. DEMOCRACY IN EL SALVADOR TODAY 11

III. EL SALVADOR'S NATIONAL INTEREST AND ITS EFFECTS ON ECONOMIC DEVELOPMENT 15

A. LEVELS OF DEVELOPMENT 15
1. Non-Developed 15
2. Under-Developed 16
3. Developing 16
4. Developed 16
5. Core 17
6. Power 17

B. SALVADORAN NATIONAL INTEREST 17
1. 1900-1950 17
2. Pre-War Period (1965-1978) 19
3. Wartime Period (1979-1984) 21
4. Post-War Period (1992-1995) 23

C. SALVADORAN NATIONAL INTEREST PROJECTIONS 24

D. HISTORICAL NATIONAL INTEREST 25

IV. PRODUCTION IN EL SALVADOR 27

A. THE EVOLUTION OF THE SALVADORAN ECONOMY 27

B. GROSS DOMESTIC PRODUCT 31

C. CHANGES IN INCOME DISTRIBUTION 32

D. GDP EXPENDITURE ANALYSIS 34
1. Personal Consumption 34
2. Private Investment 35
3. Government Purchases 36

E. SALVADORAN ECONOMIC VARIABLES 36
1. Inflation and Prices 36
2. Economic Growth 36
3. The Labor Market and Unemployment 38
4. Population and Scarcity 40
5. Export Leverage 40
6. Remittances and Long-term Challenges 43
7. The Trade Deficit 43

F. EL SALVADOR'S ECONOMY IN THE REGION 44

V. THE SALVADORAN TRADE DEFICIT 47

A. WHO ARE EL SALVADOR'S TRADE PARTNERS, AND WHAT IS THEIR CONTRIBUTION TO THE TRADE DEFICIT? 47

B. DOES EL SALVADOR BENEFIT FROM ITS TRADE RELATIONSHIPS? 48
1. Comparative Advantage Analysis without Trade 49
2. Comparative Advantage Analysis with Trade 50
3. Trade Welfare 52

C. THE IMPACT OF THE DEFICIT ON DECISION MAKING 54
1. Exchange Rate 55
2. The Migration Effect 57

D. EFFECTS OF THE PATTERN OF TRADE 58

E. GOVERNMENT INTERVENTION 64

VI. THE CURRENT ECONOMIC PICTURE 67

A. THE ECONOMIC STRENGTHS 67

B. THE ECONOMIC WEAKNESSES 68

C. THE ECONOMIC THREATS 70

D. ECONOMIC OPPORTUNITIES 72

VII. CONCLUSIONS AND RECOMMENDATIONS 73

A. CONCLUSIONS 73

B. RECOMMENDATIONS 74

LIST OF REFERENCES 77

BIBLIOGRAPHY 79

APPENDIX A. NATIONAL EXPENDITURES IN EL SALVADOR: 1976-1995 81

APPENDIX B. DEFENSE, DEVELOPMENT, AND DEBT EXPENDITURES: 1965-1995 83

APPENDIX C. GROSS DOMESTIC PRODUCT 85

APPENDIX D. EXPENDITURE APPROACH ANALYSIS 87

APPENDIX E. SALVADORAN TRADE BALANCE 91

APPENDIX F. TURNOVER IN SALVADORAN EDUCATIONAL INSTITUTIONS 97

INITIAL DISTRIBUTION LIST 101

LIST OF FIGURES

1. Salvadoran National Interest: Expenditures on Defense, Development, and Debt Service -- 1965 to 1995. 25
2. Evolution of the Salvadoran Inflation Rate: 1980-1994. 37
3. Evolution of Salvadoran Real Growth: 1980-1994. 38
4. PPF Curves for El Salvador and the United States. 50
5. PPF Curves with Trade. 51
6. Analysis of Trade and Welfare 52
7. Exchange Rate Analysis of Currency as a Commodity. 56
8. Unemployment and the Minimum Wage in the Post-War Period 62
9. Labor Market During the War. 63

LIST OF TABLES

1. Salvadoran Budget Allocations as a Percentage of Total Expenditures: 1900-1948. 18
2. Salvadoran Development Expenditures: 1900-1948. 19
3. Composition of the GDP by Production Sector. 31
4. Distribution of Families by Income Level -- 1946. 32
5. Distribution of Families by Income Level -- 1993. 33
6. Salvadoran Expenditures. 34
7. Educational Level of Employed Labor, 1993 39
8. Salvadoran Emigration to the US. 41
9. Remittances as a Percentage of National Income -- 1975-1994 42
10. Economic Growth in Central America -- 1995. 44
11. Output per Unit of Labor: US vs. El Salvador. 49
12. Benefits from Trade 51
13. Salvadoran Welfare Analysis. 53
14. US Welfare Analysis. 54
15. Salvadoran Balance of Trade. 55
16. Salvadoran Trade Deficit vs. Exchange Rates -- 1988-1995. 57
17. Salvadoran Remittances vs. Deficit. 57
18. Changes in Unemployment and the Minimum Wage. 60

I. INTRODUCTION

El Salvador is a 6,020 sq. mi. country located in Central America which inherited an agricultural export economy from its colonial past. In the early years, this style of production was probably enough to satisfy the population's needs. With a growth rate of 3.2% annually, however, the population has grown to approximately 6,000,000 people today. This growth, combined with a lack of natural resources, low capital and technological investment, persistent political instability, and an ever-increasing trade deficit has lowered the Salvadoran standard of living. Social dissatisfaction provoked a civil war that lasted 12 years (1979-1991), destroyed the most of the country's infrastructure, and created even more social problems. Furthermore, the trade pattern has induced several negative economic effects, among which a trade deficit and bad income distribution seem to be the most harmful.

During the 1980's, the government imposed several measures (subsidies, quotas and tariffs) in an effort to balance the trade with other countries. This decade was also marred by civil war. These two factors combined to severely affect the economy and trade.

After 1986, the government liberalized the economic system to move toward the implementation of a free market system (three years before the end of the war). The trade deficit responded with an increasing trend, while interest and foreign exchange rates seemed to be stabilizing. Unfortunately, the Salvadoran standard of living has deteriorated to even lower levels than those experienced during the war.

The objective of this thesis is to develop a diagnosis of the Salvadoran economy using techniques from the fields of comparative economics, microeconomics, and policy analysis. In

relevant courses at the Naval Postgraduate School, the literature was observed to contain many case studies of countries that have "extricated" themselves from underdevelopment. Most of these countries have natural resources and some level of technological capability or the economic muscle to obtain it. There are few studies of "third world" countries that lack economic capacity, technology, and natural resources to develop, as is the case in El Salvador. It is hoped that this investigation into causes, consequences, and possible cures for the Salvadoran economy will, therefore, contribute to an understanding of the issues involved.

Chapter II examines El Salvador's democratization process from a historical perspective. Chapter III analyzes the country's budgetary priorities as evidenced in allocations from 1900 to 1995. The goal of the chapter is to present the evolution of the national interest over different administrations, as well as summarize of the resulting economic effects. The analysis is divided into three periods of study related to the Salvadoran civil war: the pre-war, wartime and post-war periods.

Chapter IV ascertains El Salvador's economic standing. The principle factors analyzed include real GPD data and social and economic indicators related to production information. Viewed over time, these indicators provide insight into economic trends in El Salvador. The discussion also examines the production sectors to determine their strengths and weaknesses from a resources efficiency point of view.

Chapter V analyzes the implications of El Salvador's increasing trade deficit from the perspectives of efficiency and equity. This analysis was based on trade information obtained from national and international sources. The objective was to examine the country's comparative advantages, welfare benefits from trade, and how trade patterns affect El Salvador's economy.

Chapter VI examines the future of El Salvador's economy. Discussion of possible directions is based on the information presented in previous chapters, and occurs in light of the economic strengths, weaknesses, threats and opportunities presented by the current economic situation.

Chapter VII offers conclusions and recommendations, including discussion of a number of short and long term policy considerations that could positively affect El Salvador's economic future.

Throughout this thesis, the starting point for empirical analysis is the raw data obtained from Salvadoran and international sources. From time to time, however, the reader may note assumptions which are intended to simplify the problem or to facilitate the readers interpretation of the analysis.

II. THE SALVADORAN DEMOCRATIZATION PROCESS

The present chapter will examine El Salvador's democratization process. The analysis develops an understanding of the type of society and a comprehension of the historical leadership styles and their socio-political consequences. For any country, the development of economic opportunities for the future is dependent on long term political stability. It will, therefore, be useful to examine the level of political stability in El Salvador.

In the New World order, political stability can be measured by the degree of practiced democracy. However, in the case of El Salvador, democracy is the result of a long process that is still ongoing. Hence, the approach of the analysis will be to determine expected political stability in the context of the democratization process.

A. ORIGINS OF THE SOCIO-POLITICAL STRUCTURE

During colonial times, Spain was the country's only trading partner. El Salvador was essentially a slave society with a single agricultural export: indigo. After emancipation took place on the 15th of September, 1821, a government was established by the "Criollo" leaders of the independence movement, who opened market relations with the United States. Later, with the development of synthetic colorants for clothes, production of indigo was no longer profitable. Coffee, which had been introduced in the 19th century, became the main export crop.

The elite level of society controlled all production and trade, and therefore exclusivly represented the commercial interests of El Salvador in the international marketplace. The government existed to represent these same interests, and the resulting investment opportunities

presented to international corporations did much to overcome the country's dependence on agriculture.

The power of the elite was the product of its ownership and control of land, capital and commerce. Its political power was inseparable from and existed to preserve this economic domination. The Army was expected to play a supportive but subordinate role in maintaining the existing political and economic structure.

Popular discontent and protest was the inevitable product of such conditions. These were expressed in innumerable episodes of violence on the part of individuals and small groups, and significantly large and frequent peasant uprisings. Such protests were met by increased repression.

B. THE AUTHORITARIAN REGIME

In the early 1930's, against the background of a worldwide depression, there was a superficial shift of power from the elite to the Army. For the next fifty years, a series of military dictatorships installed by the elite would control the country.

El Salvador, along with other countries in Central America, began modernizing its social structures in the 1930's. Inequalities based on social privileges from colonial times were no longer fashionable. Fundamentally, however, the conservation of income by the wealthy elite continued unchanged, and remains a key social, economic, and political issue to this day. Beyond excessive concentration of wealth, however, the political control exercised by the elite developed a single agricultural export and a continued dependency on imported manufactured goods. The lack of industrial development insured that the prevailing situation mirrored that

inherited from colonialism, with the result that movement on the social ladder was virtually impossible.

After World War II, the military leaders of El Salvador began to promote change in the economic policy. It was becoming increasingly obvious that the single agricultrual crop would not support the necessary infrastructure for industrialization, which had become a necessity in the political climate of Central America and in the economic climate of the world. What made additional development possible at this time was the high international price of the coffee in the post-war period, combined with an increase in coffee production that catapulted El Salvador to prominance as one of the largest coffee producers in the world. The direct results of these two factors were the expansion of the domestic market and a sharp increase in government revenues.

While this presented an immediately attractive situtation to the leadership, they were acutely aware that the reliance on a single agricultural export had produced a very unstable income situation; variations of price in the external market, and the unreliability of weather conditions seriously eroded the ability of the country to support continuous growth through agriculture. The decision was made to begin investing in the country's industrial capacity, and that meant it would be necessary to establish sufficient infrastructure to support industrial expansion.

The first step was to diversify the country's agricultural export products by developing new export crops (most notably cotton and sugar). The government began to invest in roads, water supplies, and power plants. These initial efforts were relatively successful, and by 1970's the economic and social structure of El Salvador had been transformed in fundamental ways. Military dictatorships continued to rule the country, but as developmentalists ostensibly oriented

toward a limited style of democratization. Some signs of progress were that unions and political parties were allowed to organize in the cities. In 1964, opposition representatives occupied seats in the national legislature. These developments in democratization were based on recommendations by the Economic Commission for Latin America.

The infrastructure created in the earliest stages of development began to produce results between 1960 and 1970. Industry grew at an amazing pace, reaching rates of 8.1% per year (North, 1985, p. 43). This change also lead to urbanization. In 1971, 34% of the population lived in the cities, in contrast to 26% in 1950.

The new economic policy transformed the country's social structure. The prosperous middle and upper classes together made up 13.6% of the population by 1970. An industrial working class comprising 11.1% of the population emerged in the urban centers. At the same time, however, 75.3% of the population lived under survival conditions.

In commercial terms, the diversification of export products was successful, but it used all of the country's arable land. The crops promoted by the government required cultivation by rural workers, but only on a seasonal basis. The exclusive use of the land, and the intermittant demand for large numbers of laborers, meant that both land and work were denied to the rural population. The drop in food crop production resulting from a lack of available land coincided with the century's most rapid population growth.[1] These events induced severe hardship for the rural population, and created a national dependence on food imports.

These factors combined with frustration over an inefficient welfare system, the ineffectiveness minimum wage legislation, and the lopsided distribution of income led many

[1]According to statistical information, in 1948 the total country population was 2,047,000, but up to 1970 the population was

Salvadorans to voice their discontent. The immediate option for many Salvadoran peasants was migration toward Honduras and the United States, for political as well as economic reasons. While unions and political organizations were allowed, those that were out of favor were ruthlessly repressed; the search for a political voice was necessarily one beyond the nation's borders.

C. THE BEGINNING OF THE END OF AUTHORITARIANISM

In 1969, 130,000 of the 300,000 Salvadorans living in Honduras were forcefully expelled from that country to return home as refugees. On July 14, 1969, the Salvadoran army invaded Honduras in an effort to stop the ongoing abuse of human rights. The increased demand on El Salvador's industry to provide jobs resulted in rising unemployment levels.

During the 1970's the opposition political parties and the Catholic church promulgated agrarian reform and the rights of the peasants. Popular discontent was manifested throughout the 70's, making foreign investment unstable; foreign capital outflow from the country led to a worsening economic picture. Though promised, agrarian reform never took place, and the last opportunity to stabilize the country was lost.

On October 15, 1979 a military coup took place and an apparently reformist civil military junta was established. On January 3, 1980, several internationally respected civilians in the October Junta found that they were to have a purely ornamental role in a government intended to camouflage continuing repression. Unable to control the armed forces or to persuade the landed class to accept necessary reforms, specifically, genuine agrarian reform and power sharing with the country's popular organizations, they resigned. The social problems of the country had been

---

already 4,500,000 inhabitants.

used for the communist leaders to organize the peasants, and El Salvador's revolution was imminent.

D. THE CHAOS OF THE POWER VACUUM

The centralized state system imposed during the 1980's, after the removal of a military dictatorship, launched agrarian reform as a quick political solution to the social problems created by the elite mono-cultivist society. This was done without a deeply thought out plan. It further damaged the country's already weak economy of the country and brought more social problems to the new government junta.

From 1979 to 1980, the Government nationalized the financial system, the export agriculture industry, the services sector, and the agricultural industry. The state regulated the economy, and implemented an extensive subsidy policy.

The country's problems during the 1980's were complicated by a popular rebellion that lasted twelve years. During this period, most of the country's infrastructure was destroyed, and almost all the economic activities disappeared.

The manufacturing sector remaining in the country was protected by the government by eliminating taxes and extending preferential long term credits. The nationalized factories, however, were decreasing production while expenses were increasing, which led to a non profitable manufacturing sector. The following years saw repeated attempts to prevent the communist rebels from taking over the government by force. Democratic solutions were difficult in the power vacuum created since the coup. The social crisis had gone beyond the political arena. The majority of both the government and the rebel leadership was corrupted. Corrupt interests obstructed peace negotiations, while thousands of lives were lost every day.

From 1985 to 1988, the Salvadoran government continued fighting the guerrillas without positive results. The major change in the political landscape of this period was the presence of decisive support from the United States. This support did little more, however, than reinforce the non-productive strategy of confrontation; the external vision to solve the problem was "guns instead of attempting to attack the causes and search for a rational solution to democratization."

Finally, on the 16th of February of 1992, a peace agreement was signed ending 12 years of civil war. President Alfredo Christiani, a member of the upper class who was elected in 1986, was the one who spearheaded the peace process. From that starting point, El Salvador obtained significant political, economic and social improvements, including the subordination of the Armed Forces to civilian authority.

In 1994 the second transparent elections took place; this time under more peaceful circumstances. The Christian Democratic party, the ruling party during most of the wartime period, obtained only 10% of the vote. This result could be interpreted as the people's response to the party's (Democratic) past history of ineffective and corrupt administration. The Communist Coalition obtained 33% of the vote. The winner, with 44% of the electorate, was Armando Calderon Sol, a member of the conservative party, who benefited from the good management of his predecessor, Alfredo Christiani. Significantly, this election marked a loss of unity in the Communist coalition; hardline communist groups were separated from the centralist ones.

E. DEMOCRACY IN EL SALVADOR TODAY

The democratic process in El Salvador is still evolving. Institutional inefficiency provides a focus of attention for the forces opposed to democracy, thanks to the incompetence of both the

government and political parties. The current political climate is defined by the following destabilizing trends (Central American University, 1995) :

- The Government has faced difficulty in addressing the needs of demobilized soldiers and former guerrillas, who have taken their protests to the streets; some radical groups threatened to take up arms again.
- There are limitations to the credit, training and technical assistance available for the government's land transfer program, which is a potential for more social disorder.
- The rise of organized and unorganized crime have led some people, in desperation, to call for the return of the armed forces, which in turn feeds a level of paranioa among the former rebels.
- In attempting to cope with the most evident problem in government, a lack of funds, direct individual taxes have been increased from 10% to 13%. This move made the government unpopular.

Democracy in El Salvador is in a fragile state because its political institutions have not been able to define and solve the specific causes of instability. Implementation of the solutions to these problems will also require considerable levels of finance. There are insufficient internal resources to pay the bill for twelve years of civil war. During the war, international military aid was forthcoming for both warring groups especially from Washington, together with UN promises of economic assistance in the post war period. None of the promised economic assistance is being delivered. The results of this scenario are painfully felt by the ordinary Salvadoran, who would note that democracy cannot be achieved on an "empty stomach".

Simply put, short term political stability depends on El Salvador's ability to obtain external economic assistance. Long term stability, however, can only be achieved through successfully managing the country's economic policy in light of the limited natural resources.

This chapter has discussed the social origins of the country, its political evolution, and the level of the nation's political stability. The next chapter presents an historical analysis of El Salvador's budgetary expenditures. The objective is to determine what level of economic development has been dictated to pursue the country's national interest.

III. EL SALVADOR'S NATIONAL INTEREST AND ITS EFFECTS ON ECONOMIC DEVELOPMENT

This chapter determines El Salvador's historical national interest and the resulting state of development in the country. To accomplish this objective, El Salvador's budget allocations from 1965 to 1995 will be analyzed. Budget information for 1976 to 1995 is presented in Appendix A, and is divided into two major variables; national defense and national development (these two components are presented independently in Appendix B). The analysis will be enhanced by using historical information on the relevant events to illustrate the country's situation in the period under study. Economic effects will be extrapolated from economic and social indicators of the period.

A. LEVELS OF DEVELOPMENT

In order to facilitate the analysis it is necessary to define the possible levels of development from which El Salvador as any other country could seek its national objectives. For this reason six categories of development will be defined upon which a country could orient its national interest. These levels are defined in the following subsections.

1. Non-Developed

This status will be defined as the basic level at which a country can be considered as a nation. In other words, the only assets acquired are population, territory and certain level of sovereignty, with an undefined government structure. The majority of inhabitants are not able to satisfy their physiological needs.

2. Under-Developed

This status will have additional assets to those found in a non-developed nation: a defined government structure, basic infrastructure consistent with limited utilities (water and electrical energy), health care, elementary education, primary and secondary roads, urban and rural collective transportation, basic international communication system (ports, airports and railroads). The majority of inhabitants of the country have satisfied their basic physiological needs.

3. Developing

This is a status of transition that is very difficult to define, because while some political, economic and social sectors have reached acceptable levels of development, others sectors are stagnant. The country has reached an adequate level of political stability, and is able to generate enough resources to carry out economic and social plans to meet good standards of infrastructure for growth toward development. This stage is the most difficult for a country to pass, and depending on the political stability and on the resources available a country can suffer stagnation, or even worse, it can suffer from a cyclical movement between this stage and the under-developed status. The investment in human capital becomes a medullar issue in the government policy. The inhabitants of the country can have an erratic improvement in their self-esteem.

4. Developed

Developed nations are those that have maximized their assets under their resource constraints. They have the ability to decide their destiny as autonomous countries. Some of the characteristics of this status are a healthy economy and long run political stability. The majority of the inhabitants have reached a level of self actualization.

5. Core

The difference between a core nation and a developed nation is that the core nation is not only autonomous, but also able to exercise influence among other countries in seeking its own interest. The inhabitants do not differ much from inhabitants of developed countries.

6. Power

These countries are the ones that are able to direct the world order toward their own interests. This results in having influence over groups of nations and regions.

It is obvious that not all countries are able to progress through all the stages, because progress will be subject to the resource capabilities of each individual country. Nevertheless, each country will try to maximize their development level given their resource constraints.

B. SALVADORAN NATIONAL INTEREST

1. 1900-1950

Budgetary figures tell the history of a government's intentions over a specific period. Table 1 presents El Salvador's budget allocations separated into two historical periods. The first period is from 1900 (78 years after emancipation) to 1933, the year after the oligarchical government ended. The second period, from 1934 to 1948, occured during the governance of authoritarian regimes.

It is interesting to note that during the 35 years of the first period, defense allocations averaged 21% of total expenditures, almost 8% higher than in the following period. Some of this large investment can be attributed to the need for building up the army due to the external threats. The Salvadoran Army fought in 27 battles after its independence; against Mexico, Guatemala, Nicaragua and Honduras, and also fought against the filibuster William Walker. Another reason

was the need for internal security due to the repressive styles of governments established after the colonial period, where force was used against the native americans.

Table 1. Salvadoran Budget Allocations as a Percentage of Total Expenditures: 1900-1948.

(Source: Wallach and Adler, 1951)

Period	Defense	Development	Debt Service
1900-1933	21.8%	51.7%	26.5%
1934-1948	15.0%	75.9%	9.1%

Debt servicing during the first period was almost three times higher than during the second period. The great difference in these levels of expenditure has several causes. During the first period, several external long term loans were granted to El Salvador, particularly in 1922. These loans were used to develop the agricultural export infrastructure and thereby improve the economy. The drastic reduction of the debt service in the second period can be attributed to two primary causes: 1) From 1939 to 1944 service of the long term foreign loans was suspended, and 2) the terms of the long term debt agreements were renegotiated afterward.

From 1900 to 1933, development expenditures were represented by debt service. Therefore, to analyze the development priorities, this budget category has been broken down into general management, cultural and social expenditures, and economic development. Their shares will be expesed as a percent of the total development expenditures (see Table 2).

Table 2. Salvadoran Development Expenditures: 1900-1948.
(Source: Wallach and Adler, 1951)

Period	General Management	Cultural and Social	Economic Development
1900-1933	57.3%	18.0%	24.7%
1934-1948	50.2%	23.4%	26.4%

There seems to be less interest in human capital and social investments in the first period than in the second, when the authoritarian regimes ruled the country. The difference is not of a magnitude to indicate a decisive intention to change the orientation of Salvadoran development. It appears that the difference can be attributed to the military taking advantage of the debt service reduction to increase other expenditures. Hence there is no sustantial difference in the allocation priorities between the two periods.

2. Pre-War Period (1965-1978)

During this period El Salvador could be considered to be under-developed. The government was a dictatorship established by the ruling class; the orientation of the national interest is shown by the budget allocation of 18.03% for national defense. The probable reason for this allocation was the instability of relations with the neighboring country of Honduras. Poor border delimitation and the commercial trade patterns that favored El Salvador were issues of conflict. Internal political instability was not only evidenced by multiple changes in government, but also by the exodus of Salvadoran peasants to United States and Honduras in search of improved living conditions. At this time, however, 81.96% of the budget was devoted to creating an urban educational infrastructure, and to start a new health care system for the industrial class. In 1969 the so-called "Soccer War" took place between El Salvador and

Honduras. Because of this war, half of the Salvadorans peasants living in Honduras were returned to their country as refugees; worsening the social and economical climate in El Salvador. In 1970, the budget allocations indicate 16.4% for defense and 77.20% for development. Both reductions in investment resulted from the budgetary compromises to support defense spending during the pre-soccer war period. The government continued to focus on solving basic urban infrastructure problems, while the rural population, accounting for 75% of the total, was not able to meet even the most elementary social needs. It appears that during this period El Salvador's national interest was focused on the demands of urban minorities and responding to external threats.

From 1971 to 1978, El Salvador continued to stagnate as an under-developed country. Internal political and social problems were getting worse. Electoral fraud, in 1972, accelerated the radicalization of groups among society. The government's inability to accurately guage the threat of dissatisfaction to internal political stability is evidenced by the low defense budget allocations of the period; had the leadership realized the seriousness of the situation, there would have been a more substantial effort to fund security forces to maintain internal order.

From 1976 to 1978, budget allocations for national defense increased by insignificant amounts, considering the level of the internal threat. Defense spending moved from 9.06% to 11.72% of the total budget. The oligarchy ignored the social needs of the people, whether as a result of the impression that the people were submissive, or of a single-minded pursuit of profit. The government kept trying to solve the social problems with "band aid" solutions. Budget allocations reflect this strategy; from 1976 to 1978 the investment in development was slowly dropping from 85.6% to 82.9% of the total budget allocation. The principal effort was made in

long term investment in education, health care, and improvements of the economic infrastructure. Hydroelectric plants, a new airport, highways, school buildings, health care units, and recreation facilities were constructed during this period. However, these actions, that were viewed by many as a last opportunity to make positive gains among the population, became parts of a failed strategy when yet another military dictatorship was imposed in 1977. In this period, promised agrarian reform never took place, and came to be seen as a convenient measure to maintain the power of the elite. The national interest was again to defend the interest of a few over the interest of the majority.

3. Wartime Period (1979-1984)

In 1979 a military coup took place. This coincided with a consolidation of leadership among the communist groups. With the principal players in place, everything was ready for civil war, which was not long in coming.

The neighboring country of Nicaragua fell to communist rule in June of 1979, after a short rebellion. This event would play an important part in launching the attempted communist revolution in El Salvador. In 1981, the first major offensive by communist guerrilla forces took place in the most important urban areas of the country, but proved unsuccessful. The first elections for legislative seats and municipality heads took place in 1982, and in 1984 Napoleon Duarte was elected President of the Republic in a questionable election. The following years saw a government policy that essentially amounted to an ongoing attempt to prevent the communist rebels from taking over the government by force.

Increasing national defense budget allocations, from 11.6% in 1979 to 25.2% in 1984, demonstrate clearly the government's objective: to stop the communist movement. On the other

hand, the drastic reduction in national development expenditures, from 82.5% in 1979 to 54.8% in 1984, were used to subsidize the physiological necessities of the population and to sustain the nationalized agricultural industry and the remaining economic infrastructure.

From the analysis it can be concluded that El Salvador's national interest was oriented toward solving internal instability problems through action in the political, economic, social, and national defense arenas.

From 1985 to 1988, El Salvador's government kept fighting the guerrillas, with no positive end to the conflict in sight. The main difference during this period was the decisive support of the Reagan Administration and the change of US strategy with regard to Central America. The United States altered its view after the Carter Administration's policies failed to prevent the spread of communism in Central America, as evidenced by the communist takeover in Nicaragua. The firm intentions of the Reagan Administration left little room for interpretation: *"....This tiny country where President Reagan said he was drawing the line against communism is the target of the most sophisticated counterinsurgency war ever directed by Washington..."* (Barry and Preusch)

The budget allocations during this period were relatively stable, averaging 29% for national defense and 53% for economic development. This information reflects the influence of US aid, because the level of expenditures maintained an almost constant trend, in spite of the dismal outlook of the military situation and the fact that the country's infrastructure was almost completely destroyed. The war involved very sophisticated levels of engagement, and the combat readiness of the Armed Forces improved compared to the start of the conflict. During

this period, the Armed Forces grew from 8,000 to almost 65,000 members, and training and equipment continued to be provided by the US.

The national interest of this period dictated modernization of the national defense forces. However, a dedicated effort was also made by the civil and military leadership to support projects designed to restore infrastructure. This was a method of gaining the faith and cooperation of the people.

The first transparent presidential elections were held in 1989, when the conservative party was elected to office. The communist party took note of its poor showing at the polls and made a last attempt seize power by force. After the failure of the guerrilla offensive, the communists had no choice other than to start peace negotiations with the government.

Economic development in this period was significant. The new party in power brought with it a series of new policies, oriented to restoring the principles of private property, privatizating national assets, liberalizing the market economy, and renewing El Salvador's presence in international trade by eliminating protectionist barriers. For the first time in the history of the country, the focused national interest was to obtain sufficient infrastructure and political stability to promote development.

4. Post-War Period (1992-1995)

In 1992, the peace negotiations were successfully concluded, bringing peace after thirteen years of war. From that point, El Salvador obtained significant levels of political, economic, and social improvements, and subordinated the Armed Forces to civilian authority.

The budget allocations for national defense dropped from 19.5% in 1992 to 17.95% in 1995, while the economic development expenditures increased from 51.7% in 1992 to 62.04% in

1995. A special effort was made to make debt payments current and to reduce the debt service load from 28.8% in 1992 to 20% in 1995.

At the forefront of the national interest during this period was the desire to restore national and international credibility in the country's political, economic, and social systems; such credibility would be necessary to recapture foreign and national private investment. These investments would be required for El Salvador to make a serious effort at development.

C. SALVADORAN NATIONAL INTEREST PROJECTIONS

The budget allocation data analyzed for this thesis include 1965 to 1995 figures on spending for defense, development, and debt service. By graphing the percentage of total budget expenditures in these catagories over the relevant period, it is possible to make observations about the perceived national interest of the governments in power. The trends revealed in the graph (see Figure 1) provide insight into the evolution of the national interest in El Salvador.

The period prior to the civil war witnessed an increasing trend in defense expenditures, with a corresponding drop in resources devoted to development and a reduction in debt service spending. In the second phase of evolution (indicated by "Wartime Period" in the figure), the trend continued. Development expenditures fell to a minimum of 52.4% in 1986, while defense spending increased to 29.8% in 1985. At this point, both levels of spending remained relatively stable until the end of the conflict. In the period following the war, the trends reversed; defense spending was reduced as development expenditure increased. Defense expenditures were reduced more slowly than the rate of increase for development funding. This discrepancy is due to the high levels of internal instability experienced in the wake of the war.

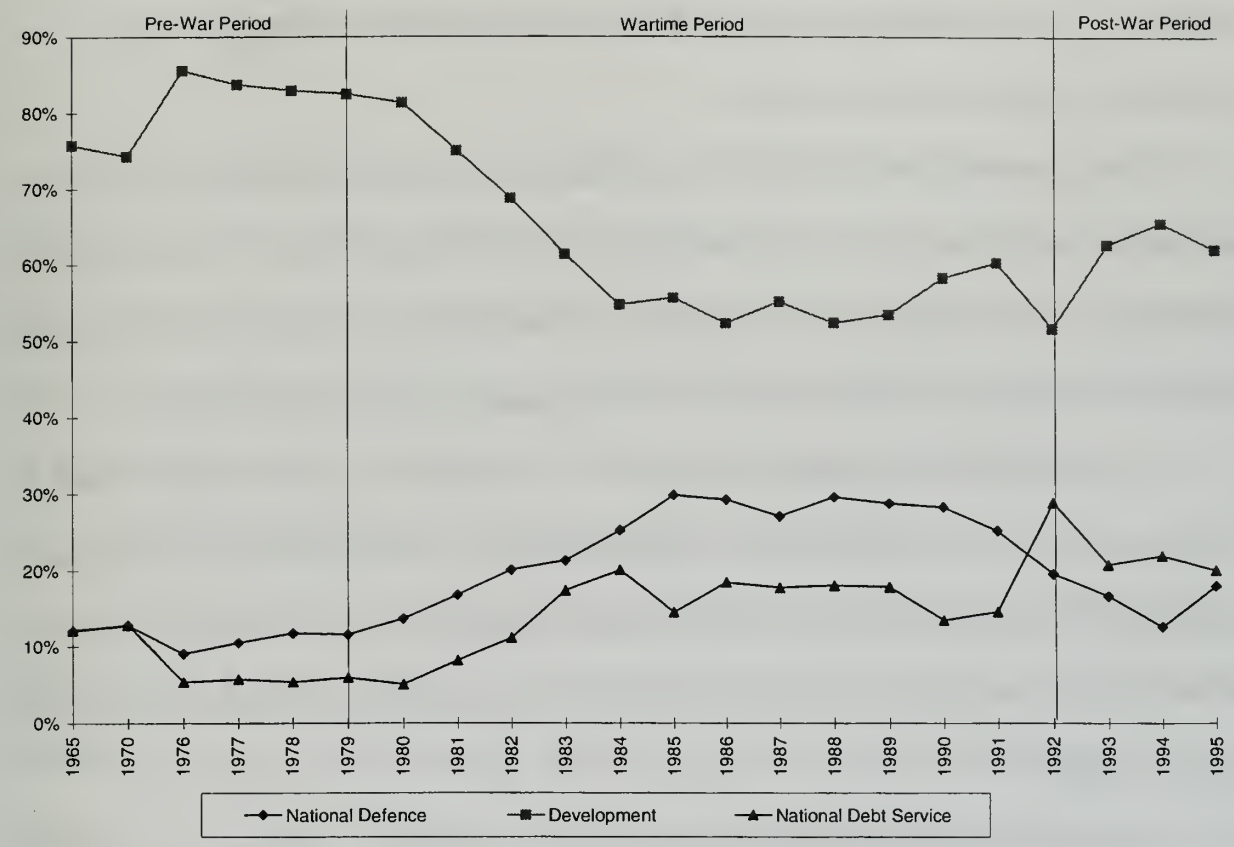

Figure 1. Salvadoran National Interest: Expenditures on Defense, Development, and Debt Service -- 1965 to 1995.

Given that the country maintains the political stability required, it is likely that the following decade will exhibit similar spending levels. The trend in national interest will be for El Salvador to sacrifice national defense expenditures to reallocate the resources toward development.

D. HISTORICAL NATIONAL INTEREST

El Salvador has a traditional national interest inherited from its colonial past. This national interest was defending (from internal or external threats) the self-interest of the few (the societal elite who controlled the agricultural export economy) over the interest of the majority. This orientation lasted over a century, and lead to high levels of dissatisfaction among the

population. Dissatisfaction grew so acute that civil war was the inevitable choice as a mechanism to reorient the national interest.

Viewing the situation in this way, it is possible to say that El Salvador did not have a legitimate national security policy until 1992 (one that represents the interests of the majority of Salvadorans). With the post-war development of a new national structure, a newly formed national interest has developed that will help define a coherent national security policy.

In discussing the development status of El Salvador, this hope for the future is insufficient cause to regard the country as anything more than under-developed. El Salvador's progression toward development is currently focused on defending the new basic goals of peace and security, and developing a democratic system to ensure equality in opportunity and rights among its citizens.

This chapter has examined the historical records of Salvadoran budgetary expenditures. Perceived objectives of the national interest have been explored in three periods relating to the twelve-year civil war, and these expressions have been examined in light of their economic results. The next chapter will analyze the evolution of the Salvadoran economy within the same historical periods. The research emphasis will be the country's productivity and its historical relation to socio-economic variables. The methodology developed is intended to explain the sources and the potential solutions for El Salvador's economic instability.

IV. PRODUCTION IN EL SALVADOR

The present chapter analyzes El Salvador's productivity and its socio-economic effects. The first part of the chapter discusses the historical evolution of the economy. Secondly, production is analyzed using the gross domestic product (GDP)'s production sectors, structure, and its links to income distribution and remittances. Finally, from the socio-economic indicators the actual economic status is deduced in a chronological and regional comparison.

A. THE EVOLUTION OF THE SALVADORAN ECONOMY

In 1946, El Salvador was one of the most densely populated areas in Central America, with an economy based primarily on agriculture, particularly on coffee. Some 2,047,000 Salvadorans produced a gross national product of US$174 million, a per capita rate of 218 *colones* (US$87). Roughly 200 million *colones*, or 46% of this gross national product came from agriculture and pastoral production. Of this 200 million colones, the coffee crop accounted for 53 million colones, or 26%. Other basic products were corn, beans, *maicillo*, sugar, and rice, as well as hemp and cotton. Industrial production, consisting chiefly of textiles, alcoholic beverages, seed oils, hides and leather, rope, flour, cement blocks and various minor products, contributed about 14.6%. Services constituted 39.4% of the total. (Wallach and Adler, 1951)

At that time, a large part of the population was engaged in the production of domestic foodstuffs, either as a primary occupation or as supplementary employment while working in the coffee industry. In addition, a large number of families were self-sustaining units, and therefore a considerable portion of the economy was non-monetary. This level of self-subsistence is one of the most important reasons why attempts at rebellion were not successful before 1979; even in a

harsh economic climate, the peasant class was able to cultivate corn and beans to fill their most basic need – food.

The low degree of industrialization and economic diversification implied that most commodities other than those needed for basic subsistence were obtained from abroad, and needed to be paid for by exports. Even if exports accounted only for a small portion of the country's GNP, averaging about 15% during the 1940's (Wallach and Adler, 1951, p. 27), their qualitative importance for the economy was significant. Despite the low ratio of exports to gross national product, the Salvadoran economy must be regarded basically as an export economy. During this period, four-fifths of the total foreign exchange receipts were derived from coffee exports (Wallach and Adler, 1951, p. 28). El Salvador's economy was therefore a function of the volume and price of the coffee crop.

During the 1960's and 1970's, rapid real GDP growth, averaging 5.4% per year, was supported by favorable agricultural commodity prices, expanding regional markets for manufactured products following the creation of the Central American Common Market (CACM), and an accommodating and expanding international financial environment. During this period, the economy was characterized by the absence of significant domestic imbalances and low inflation, but social indicators continued to rank among the lowest in the region. The Salvadoran GDP grew by 5% annually from 1968 to 1978, for a 1.4% per capita increase, per capita production of basic grains increased as well.

The percentage of rural families not owning land climbed from approximately 12% in 1961 to 29% in 1971, and again to 41% in 1975. While this segment of the population grew, their incomes declined by 19% (more when adjusted for inflation) from 1971 to 1975. When

their incomes are measured against the average for all rural groups, the decline is 24% for the period, while the relative share of the largest landowners increased by 23%. Meanwhile, rural salaries declined in both absolute and relative terms. When measured in constant units, agricultural wages fluctuated from 1967 to 1973 and then fell by 25% in 1976 and by 30% in 1978. During the same period, agricultural salaries also lost 23% of their value compared to the industrial salaries. (Montes, 1980)

In 1979 the external economic environment deteriorated due to the adverse terms of the trade environment and the contraction of the regional markets (due to the CACM failure). These events led to severe macroeconomic imbalances and a drop of a real GDP by 22% and of per capita GDP by about 27% between 1978 and 1982.

Inappropriate macroeconomic policies, including the nationalization of the financial sector and export-marketing systems at the beginning of the 1980's, also contributed to the deterioration of the economic sectors. Beyond the fact that no plans had been prepared in advance to run the new national industries, no capital was available to carry out operations.

Wanton destruction and the disruption of the road network by insurgent guerrillas caused a sharp drop in the amount of coffee harvested and processed (to 2.5 million *quintals* in the 1984-85 season, 40% lower than in 1979-80, and 2.2 million lower than 1985-86), and also deterred investment in new crops. Approximately one-half of the farmland in the main agricultural district in the east of the country was fallow (Fraser and Payne, 1987, p. 90). The decline in coffee and cotton production can be attributed to the effects of nationalization, low domestic prices for coffee and low prices for cotton in the international market, in addition to the destruction caused by the war. Foreign exchange earnings from coffee exports (which normally

accounted for over 50% of total export earnings) declined from $675 million in 1979 to $408 million in 1983, but earnings from the 1984-1985 harvest rose to $450 million and, in spite of a smaller harvest in 1985-1986, remained high due to the rise of the world price of coffee.

From 1983 to 1989, the government tried to reactivate the economy. However, GDP growth averaged only 1.7% during this period; by coincidence, the same as the average estimated rate of population growth. Fiscal reductions took place in public investment and social sector expenditures, while the balance of payments gap was closed through more restrictive trade policies and increased external transfer inflows. These factors probably account for the stagnation stage of the GDP structure over the last decade.

Today, El Salvador is the most densely populated country in the Western hemisphere (World Bank, 1994). Its economy is still based on agriculture (40% of the labor force); as in the past, the center of gravity is still the agricultural exports. The coffee crop promises to remain the leading export, but two export competitors have appeared: the growing export manufacturing industry (*maquila*) and the so-called "export of labor" (20% of the total population is engaged in this sector, 18% of which is in the US). As mentioned earlier, 50% of the foreign exchange is historically derived from the export of coffee. Today, 70% of foreign exchange comes through remittances.

The main industries in the economy are: food processing, textiles, leather, pharmaceuticals, petroleum products, and manufacturing of machinery. Frozen shrimp is the leading agricultural export, but other goods manufactured for export market include computer components, automobile parts, light fixtures, television sets, and clothing. Industrial production is slowly recuperating from the effects of the war and the economic recession, the low purchasing

power of the population, and problems in neighboring countries. Lack of foreign exchange has in recent years hindered the procurement of raw materials.

B. GROSS DOMESTIC PRODUCT

In the 1970's, the composition of El Salvador's GDP shifted away from the agricultural economy of the 1940's. While emphasis was being placed on diversifying the economy and improving the industrial sector, there have been no major positive changes in the social sector.

Table 3 illustrates the evolution of GDP structure through the pre-war (1972-1979) and wartime (1980-1992) periods. This affords a closer look at the influence of infrastructure improvements and of the tension produced by conflict in Salvadoran production.

Table 3. Composition of the GDP by Production Sector.

Period	Agriculture	Industry	Services
1972-1979	14.0%	23.2%	62.7%
1980-1992	14.2%	22.8%	63.0%

From 1972 to 1979, the agriculture sector contributed only 14% of total GDP, 32% less than the contribution in 1946. The percentage of GDP derived from industry grew from 14.6% to 23.2%, and the services sector accounted for 62.7% of the average total GDP of the period, significantly higher than the 39.4% contribution in 1946.

When comparing the two periods, no substantial changes can be observed in the way the sectors contributed to the GDP. This is not surprising, given the influence of the war on the economy.

C. CHANGES IN INCOME DISTRIBUTION

Income distribution was among the major issues of dispute that provoked the war. To examine income distribution within the country's economic environment, an income distribution analysis will be performed by comparing the population distributions by income level for 1946 and 1993.

The distribution of families by income level for the years 1946 and 1993 presented in Table 4 were derived from income information expressed in colones. This information was then expressed in US dollars using an exchange rate of 2.5 colones per dollar for 1946 and of 8.78 colones per dollar for 1993. The resulting amount was adjusted to 1987 dollars by the US GDP deflator for each year.

Table 4. Distribution of Families by Income Level -- 1946.
(Source: Wallach and Adler, 1951)

Level	First	Second	Third	Forth	Fifth
Income (US$)	< 100	100-200	200-400	400-600	> 600
Number of Families	60%	30%	5%	2.5%	2.5%

There are some differences in the data used to compare the two periods. First, the income stratification levels used for each period differ in the range of the scale used. Second, the real purchasing power of money will differ using the adjustment process described here. The comparison on percentage terms related to the income level is, however, valid.

Table 5. Distribution of Families by Income Level -- 1993.
(Source: Salvadoran Ministry of Planning, 1993)

Level	First	Second	Third	Fourth	Fifth
Income (US$)	< 64	64-137	137-228	228-273	> 273
Number of Families	58.4%	27.7%	9%	1%	3.9%

The percentage of Salvadorans in the first and second income level categories during both periods remain essentially constant, approximately 60% and 30%, respectively. The third level of income accounted for 9% of the population in 1993, as opposed to 5% in 1946, probably due to the migration of families from the other income levels to the fourth level. Due to the difficulties in estimating the actual purchasing power correspondence from level to level, no more can be inferred about the income dynamics between the periods. It is readily apparent, however, that Salvadoran income distribution had not experienced significant changes.

For 1992, El Salvador's poverty line was defined by the World Bank as an income level that is insufficient to purchase two BFB, i.e., 51 dollars per month for urban areas and 30 dollars per month for rural areas. Extreme poverty is defined as an income level that is insufficient to purchase one BFB, or 25.5 dollars and 15 dollars in urban and rural areas, respectively (World Bank, 1994). Using this information it is possible to conclude that at least 40% of the Salvadorans are above the poverty line. According to the World Bank, Salvadoran poverty is 43% in the urban areas, 55.7% in the rural areas and 48.2% at the national level. These values do not contradict the findings of the present analysis. They indicate that there is a significant

could be. Given the low current income level, much can probably be done to reduce poverty in a relatively short time.

D. GDP EXPENDITURE ANALYSIS

Table 6 presents the evolution of GDP using the expenditure approach analysis. The periods analyzed will again be the pre-war and the wartime periods. The chart was constructed using the average values of the World Bank GDP information for each period (see Appendix C).

1. Personal Consumption

In the chart, it can be observed that between the two periods, no relevant difference exists in the levels of personal consumption. From 1988 to 1992, however, consumption increased by 5% (see Appendix D), compared to the 75% average of the last twenty years. This increase has been possible due to the increase in personal services from 19% in 1988 to almost 32% in 1992. This increase was at the expenses of a reduction in the consumption of non-durable goods. Expenditures on durable goods were essentially unchanged.

Table 6. Salvadoran Expenditures.
(Source: World Bank)

Period	Personal Consumption	Private Investment	Government Purchases	Exports
1972-1979	75.8%	8.1%	16.1%	12.1%
1980-1992	75.3%	12.0%	12.7%	7.2%

2. Private Investment

The average private investment from 1972 to 1979, at 8.1%, was significantly lower than the 12% level of the wartime period. Under normal circumstances, the difference in private investment between the two periods would have indicated an increase in either fixed investments or inventories or both, but the civil war may account for this difference. It is therefore convenient to use the information for the period 1988-92 (as found in Appendix D). From 1988 to 1992, fixed investment expenditures steadily increased from 9.5% in 1988 to 12.44% in 1992. This significant increase was due to investments in the means of production, specifically: 1) investments in industry increased by 1% from 1.91% in 1988 to 2.84% in 1992; and 2) an approximately 1% increase in communications (mainly improvements of existing roads and of the telecommunications system) from 2.94% in 1988 to 4.1% in 1992. It is impossible to determine the exact net investment, because it is difficult to differentiate improvements from reconstruction.

El Salvador seems to be improving its chances for expanding production capacity through long term investment, primarily due to legal reforms such as recognizing private property rights and intangible assets and reducing the cost of forming large firms. With the exception of 1989, when the inventory investment reached 2%, the period exhibits a trend toward reduced inventory levels. This indicates that the purchase of goods has been similar to the current level of production. In other words, it demonstrates that the level of growth could not be as high as shown in the recently published figures. While it is unlikely that inventories have been reduced, it is true that net inventory investment limited.

3. Government Purchases

Government purchases dropped 4% between the first and second periods. This reflects a reduction in public administration. More than 30,000 military personnel were demobilized immediately after the war, and 15,000 government workers were also dismissed from their jobs.

E. SALVADORAN ECONOMIC VARIABLES

1. Inflation and Prices

In Figure 2, it is easy to observe that the average inflation rate increased from 17.8% in 1980 to 32.3% in 1986. This phenomenon can be explained by four main causes: 1) the lack of goods during this period and an excess of the national currency 2) the adjustment in the rent taxes 3) the increase in the price of gasoline, and 4) the first adjustments in public services prices. A change in the trend can be observed from 1987 to 1989, when the government obtained external aid for importing goods into the country.

The 24% spike in the inflationary process in 1990 can be explained by: 1) the new increase in gasoline prices, 2) expectation effects generated by the implementation of a new individual tax system, 3) the increment in some public services and, 4) the increase in the dollar exchange rate value. From 1992, when peace was achieved and the country initiated new economic policies, the rate of inflation dropped, reaching 8.7% in 1994.

2. Economic Growth

Economic growth, as measured by the real growth rate, was negative from 1980 to 1982. From 1983 to 1988, economic growth became positive was due to the dollars sent to El Salvador from the Salvadorans working in the United States. This made the difference that permitted El Salvador to survive with a positive but erratic growth.

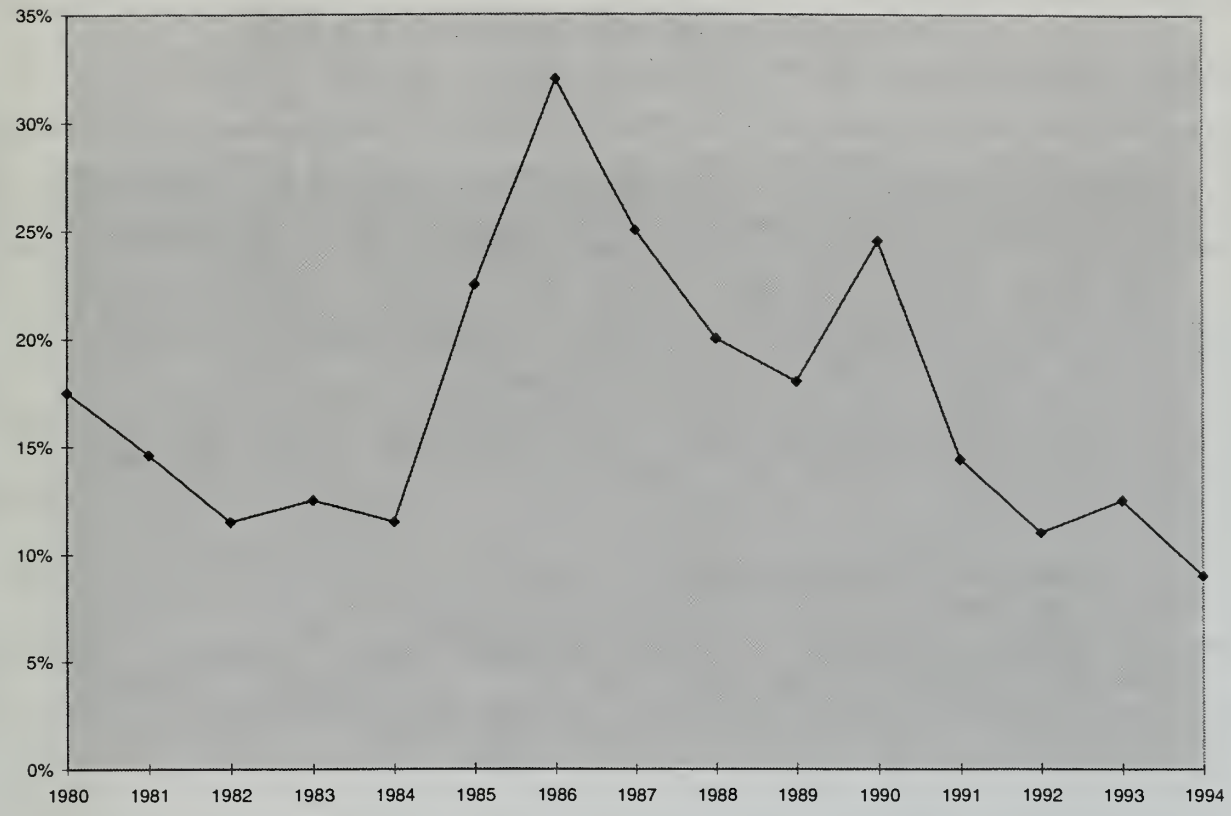

Figure 2. Evolution of the Salvadoran Inflation Rate: 1980-1994.

The government's new economic program began in 1989, and has maintained a steady focus on its objectives over time. The main objectives were: 1) to match expenditures to production capacity, 2) to open markets and provide incentives for internal and external competition 3) reform the tributary system, and 4) begin to privatize state industry.

After the end of the war, El Salvador started a more or less continuous growth trend. From 1989 to 1993, the average rate of growth was 4.3%. This shows the success of the free market policy first implemented by the conservative government in 1989. The reactivation of the

economy created 150,000 new jobs and permitted an increase in the minimum salary (*Banco Central de Reserva*, 1994).

Figure 3. Evolution of Salvadoran Real Growth: 1980-1994.

3. The Labor Market and Unemployment

In 1992, the national employment rate was 91%. Nearly half of the population, however, worked in the informal sector of the economy. In this sector, individual income is lower than that received by the population in the formal sector of the economy. This has been attributed to the lower educational and technical requirements in the informal sector (FUSADES). The lack of education and technical skills in the Salvadoran workforce is threatening the nation's economic future.

Table 7. Educational Level of Employed Labor, 1993.
(Source: Salvadoran Ministry of Planning)

Years of education	None	1-3	4-6	7-9	10-12	>13
Employee	23%	21%	23%	14%	12%	7%

Despite the high level of migration, El Salvador has a high labor force growth rate, on the order of 3% per year since 1980. The average Latin American labor force growth was 2.4% during the same period. However, as can be seen in the above table, the labor force remains largely unskilled. According to World Bank standards, 67% of the Salvadoran labor force is considered unskilled (employees with less than 7 years of education). It is notable that while the mean years of education for the Salvadoran labor force is around 4.4 years, it is 8.7 years for the Salvadorans who have emigrated to the US (Montes, 1987). Labor force participation has been increasingly urban (55%) and female (37%). Theses trends have been greatly influenced by the demobilization of the military and an overall increase in economic activity. According to a 1995 World Bank analysis, El Salvador presents a relatively flexible urban labor market, at least by Latin American standards. The labor turnover rates (exceeding 10%), and the relationship between real wages, employment, and GDP growth are fairly consistent with a flexible and competitive labor market; this holds true for total and formal employment. Sector-based shifts in employment and individual periods of unemployment are also consistent with flexible labor markets.[2] However, this also produced a modest gap between skilled and unskilled wages, which indicates a non-segmented market. This is one of the leading factors in the migration of skilled

[2]The most flexible sectors appear to be agriculture and services. The immediate past job of unemployed persons in the labor force is 43% in agriculture, 13% in services, and 10% in industry; and, for urban workers, 20% in services, 13.5% in agriculture,

indicates a non-segmented market. This is one of the leading factors in the migration of skilled labor. It also reduces the incentive to keep investing in education among the unskilled labor force.

4. Population and Scarcity

As stated earlier in the chapter, the Salvadoran population is approximately six million, proportionally distributed in the urban and rural areas. The population density is the highest of Latin America (258 inhabitants/Km^2). Some of the reasons for this situation include: the lack of education among the population,[3] and the lack of birth control campaigns during the war. The average population growth rate was 3.2% in the last decade, but it declined to 2.2% in 1992. This accelerated population growth makes providing basic services more difficult. In 1992, only 55% of the urban population had a water supply. The situation was worse in the rural areas, were the percentage decreased to 27%. Furthermore, the high population growth also increased competition for the existing employment opportunities.

5. Export Leverage

Overall, the positive real growth rate of the economy is largely a consequence of short term factors, such as the inflow of dollars from Salvadorans in the United States, which has stimulated the commerce, services, construction and financial sectors.

According to a 1994 statistical abstract of the United States, from 1971 to 1980 34,400 immigrants emigrated from El Salvador to the US; from 1981 to 1990, the same source reported

---

the unemployed have individual unemployment periods over a year.

[3]More than 27% of the population over 15 years of age was illiterate in 1994.

Table 8. Salvadoran Emigration to the US.
(Source: Salvadoran Ministry of Planning, US Statistical Abstract)

Year	Legal	Illegal	Unaccounted	Total
1985	96,000	220,000	200,000	516,000
1987	120,000	390,000	217,000	727,000
1991	322,000	478,000	146,000	946,000

According to Salvadoran sources there was a total of 516,000 Salvadorans living in the United States in 1985, which would represent 11% of the total population. Table 8 shows that 727,000 Salvadorans lived in the US by 1987, accounting for 15% of the population. The last figures show that some 946,000, comprising 18% of El Salvador's total population, were in the United States by 1991. This phenomenon was accelerated during the war (1979-1992); according to US sources, the rate of Salvadoran immigration increased by 722% between the 1971-1980 period (3,800 immigrants per year) and the 1981-1992 period (26,000 Salvadoran immigrants per year). Undoubtedly, this drastic increase reflects the political insecurity and deteriorating social and economic conditions during the war period.

As a result of this immigration, El Salvador's economy appears to benefit from the large increase in the net foreign exchange flows. These flows accelerated after 1980, and again after the 1991 Peace Accords and the reactivation of the economy. Capital inflows in the country have shown grater variability, while workers' remittances have been increasing. Therefore, higher flows of foreign exchange are largely due to the increase in the foreign remittances.

According to the World Bank, these remittances have increased faster than any other inflow, and currently represent approximately 70% of total exchange flows in El Salvador. Official transfers represent about 20%. Inflows have relaxed the foreign exchange constraints and have led to international reserve accumulation.

In particular, remittances have significantly raised national income and national savings, as may be seen in Table 9. They have increased private consumption, cushioning the fall in real wages, and have had a favorable impact on the balance of payments (akin to an increase in exports of labor). Estimates show that, on average, 70% of remittances are consumed, mostly in non-tradable goods (FUSADES, 1994; MIPLAN, 1993).

Official transfers and official medium and long term capital have originated in great part from the US and multilateral financial organizations, respectively. These have greatly limited the inflationary impact of fiscal deficits, especially since 1990, and have helped to finance peace-related expenditures.

Table 9. Remittances as a Percentage of National Income -- 1975-1994.
(Source: World Bank, 1995)

	75/79	80/88	89	90	91	92	93	94
National Savings	19.4	7.0	5.8	4.6	8.2	9.4	11.5	13.2
Gross Domestic Savings	19.6	7.0	3.1	0.1	1.3	0.4	2.2	3.4
Net Factor Income	-1.5	-2.9	- 2.0	- 2.0	-1.6	-0.8	-0.5	0.1
Remittances	**1.3**	**3.4**	**4.6**	**6.4**	**8.5**	**9.8**	**9.8**	**9.7**
Remittances as % Natl. Savings	6.7	45.1	81	140	104	104	85	73.2

6. Remittances and Long-term Challenges

The significant contribution of these factors, particularly the positive effect workers' remittances have on economic growth, are only temporary. There are two reasons for this conclusion. First, the United States is strengthening its domestic policy against immigration. This threatens the stability of the remittances inflow into El Salvador's economy. There were about 624,000 illegal immigrants in 1991, accounting for at least 67% of total Salvadoran workers' remittances. This is already an imminent danger for the fragile conditions of the El Salvador economy. Second, new Salvadoran generations in the US (with legal status) are loosing their ties with El Salvador. The older generations lose the hope of returning to El Salvador as they solidify their familial ties in the US. It appears unlikely that long term remittances will continue to provide inflows to El Salvador as they have done in the recent past. The manufacturing and agriculture industries will play the dominant roles in the future of El Salvador's economy.

7. The Trade Deficit

As demonstrated in the GDP structure analysis, El Salvador's economy has begun shifting from the agricultural to the industrial sector. The agricultural sector has not achieved significant improvements during the last eleven years, while the manufacturing industry has increased at a constant rate. In the early years, this style of production was probably enough to satisfy the population's needs. However, the 3.2% annual population growth rate, combined with low human capital investment and an ever increasing trade deficit, lowered the standard of living.

The trade pattern has induced several negative economic effects, among which the trade deficit seems to be the most harmful. El Salvador has been experiencing increasing trade deficits

since 1981. During the 80's, the government imposed several regulations (subsidies, quotas and tariffs) to balance trade with other countries. During this period, government interventions an the internal war severely affected the economy and adversely affected trade.

F. EL SALVADOR'S ECONOMY IN THE REGION

The Economic Commission for Latin America (CEPAL) reports that El Salvador experienced the highest economic growth rate (6.5%) of Central America in 1995 (see Table 10). CEPAL also highlighted the fact that El Salvador followed Chile and Peru with the third highest economic growth rate in all of Latin America. El Salvador also experienced one of the lowest inflation rates (11.4%). Honduras (28.6%) suffered the highest rate in Central America. On the other hand, El Salvador has a relatively high deficit/GDP ratio. Only Costa Rica (4.1) and Honduras (3.7) have a deficit/GDP ratio higher than El Salvador (1.6). Recuperation from the war accounts for this relatively high value, despite the fact that El Salvador's GDP growth has been among the highest in its history in the last decade. On the other hand, this high ratio is consistent with the country's accelerated growth; debt can stimulate growth.

Table 10. Economic Growth in Central America -- 1995.
(Source: CEPAL, 1996)

Country	GDP	Deficit/GDP ratio	Urban Unemployment
El Salvador	6.5	1.6	4.5
Guatemala	4.5	0.7	4.3
Nicaragua	4.0	1.5	20.2
Honduras	4.5	3.7	4.5
Panama	3.0	1.0	14.3
Costa Rica	2.5	4.1	5.2

El Salvador's urban unemployment rate is one of the lowest of Central America. However, under-employment still accounts for 50% of total workforce, making it difficult to take the official unemployment rate into account.

This chapter has examined El Salvador's economic evolution. The discussion focused on productivity and the main issues that led the country to where it is today. The next chapter will take a closer look at El Salvador's trade pattern and one of its most harmful consequences: the trade deficit.

V. THE SALVADORAN TRADE DEFICIT

This chapter is to analyzes El Salvador's trade deficit and its consequences. The objective is to address the problem from several perspectives. Although use real information related to the problem is emphasized, several assumptions are made either to simplify the problem or to facilitate the analysis.

The analysis is intended to answer the following questions:

- Who are El Salvador's trade partners, and what is their contribution to the trade deficit?
- Does El Salvador benefit from its trade relationships?
- Why is the deficit an issue for government decision makers?
- What are the effects of the current balance of trade?
- Should the government intervene to reduce the current trade imbalance?

A. WHO ARE EL SALVADOR'S TRADE PARTNERS, AND WHAT IS THEIR CONTRIBUTION TO THE TRADE DEFICIT?

El Salvador's most important trading partners are: The United States, Mexico, Germany, Guatemala and Japan. The share of each of these partners in El Salvador's trade deficit is presented in Appendix E. As a whole, the trade deficit shows an increasing trend (with the exception of Germany). As late as 1934, European countries, primarily Germany and the Scandinavian countries, were El Salvador's chief trading partners. In that year, Europe accounted for 68% of all Salvadoran exports and 36% of all imports. Since 1938, however, the United States share has grown to 62% of exports and 47% of imports. In the post-war era, the dominance of the US among El Salvador's trading partners has been even more pronounced; in

1947 the United States purchased 78% of the exports and supplied 78% of the imports (Wallach and Adler, 1951, p. 33). Today, the biggest external contributor to El Salvador's trade deficit is the US, averaging 43%. A complete analysis would account for all trading partners. However, the US is El Salvador's largest trading partner, and accounts for a large share of the total trade deficit. Therefore, this analysis will focus attention on the trade relationship between El Salvador and the US.

B. DOES EL SALVADOR BENEFIT FROM ITS TRADE RELATIONSHIPS?

Trade gains between any two countries are a function of the international price of goods that are traded, assuming those goods possess the same quality. Analyzing the comparative advantage of the produced goods in which each country specializes will help to determine the benefits of trade for both countries. Due to the complexity of the trade relationship between the US and El Salvador, a simplified model, consisting of two goods, will be applied in the analysis. The following assumptions are made in the course of the analysis.

- Both countries are capable of producing coffee and manufactured goods.
- Both countries are capable of producing products at the same level of quality.
- The only input required to produce the two goods is labor.
- The U.S. has 400 units of labor for production and El Salvador has 200 units.
- The labor units are completely interchangeable to produce either of the goods.

Given these assumptions, the discussion of comparative advantages for both countries proceeds below.

Table 11. Output per Unit of Labor: US vs. El Salvador.

	ES	US
Coffee (ton)	1	0.5
Manufactured Goods (ton)	0.5	4

The average trade prices for coffee and manufactured goods are: $2,073/ton and $629/ton, respectively.[4] Therefore, 1 ton of coffee is the equivalent of 3.3 tons of manufactured goods in the world market.

According to David Ricardo, "Maximum output arises when the firm that produced the good is the one with the lowest opportunity cost." (Gwartney) This is the law of comparative advantage. An economy not realizing their gains from specialization and division of labor is ignoring the law of comparative advantages. This is commonly the case in less developed economies, which is significant in analyzing El Salvador's situation.

1. Comparative Advantage Analysis without Trade

As shown in Figure 4, without trade the US could produce 1600 tons of manufactured goods or 200 tons of coffee or any mix between the two, constrained by the level of labor. By analogy, El Salvador could produce 200 tons of coffee or 100 tons of manufactured goods.

[4]The average price of the two goods was obtained with the information presented in Appendix E.

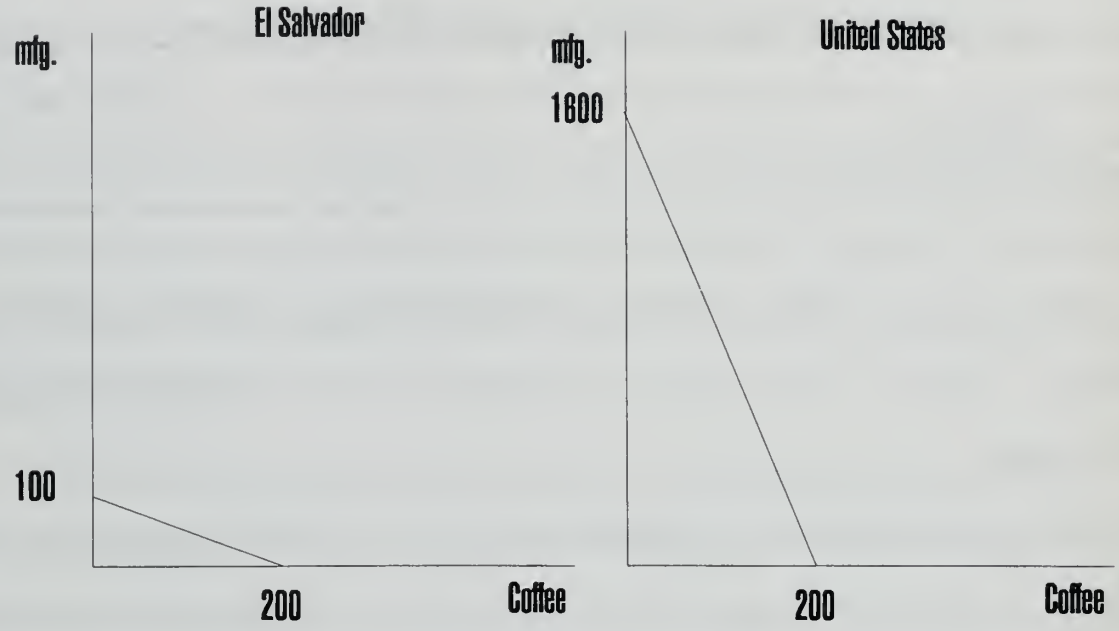

Figure 4. PPF Curves for El Salvador and the United States.

2. Comparative Advantage Analysis with Trade

With trade, each country could produce goods where a comparative advantage exists (see Figure 5). In this case, El Salvador would produce 200 tons of coffee and the US would produce 1600 tons of manufactured goods. Using the relative world prices, El Salvador's equivalent production of manufactured goods in trade is 200/0.3 = 66.7 tons of manufactured goods. On the other hand, the US equivalent production of coffee would be 1600/3.3 = 485 tons of coffee. Trade would lead both countries to an efficient use of resources. As a result, both countries would be better off, because of mutual trade gains.

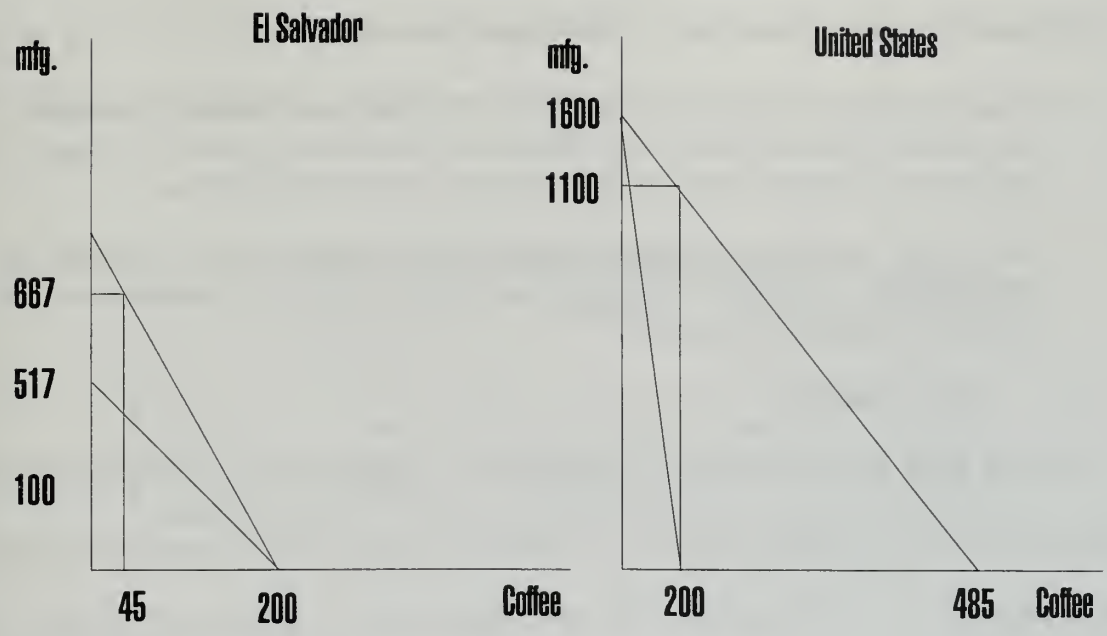

Figure 5. PPF Curves with Trade.

For example, assuming that specialization occurs under the same labor unit constraints and that the U.S. requires 130 tons of coffee before trade and 140 tons after the trade the benefits of trade may be summarized as follows (see Table 12).

Table 12. Benefits from Trade.

Goods(tons)	U.S.	E.S.
Mix w/o trade	(130 , 1080)	(70 , 65)
Mix with trade	(140 , 1040)	(60 , 560)
Trade benefits	(10 , -40)	(-10, 495)

El Salvador's benefits from trade can be summarized as follows:

- Manufactured goods consumers will have 495 more tons available, generated by the savings due to the increase in the efficiency of production. On the other hand, coffee consumers will have 10 tons less due to the increase in coffee prices.

- The coffee producers will also benefit from the extra profit generated due to specialization. However, Salvadoran manufactured goods producers would be hurt from the closing of the factories.

3. Trade Welfare

Viewing trade from the welfare perspective will demonstrate consumer and producer surpluses from the coffee trade perspective, as well as the total gains and losses that are implicit in such a transaction. For this purpose we will assume that the national coffee prices were $2,000 per ton and $2,100 ton from El Salvador and the US, respectively (see Figure 6).

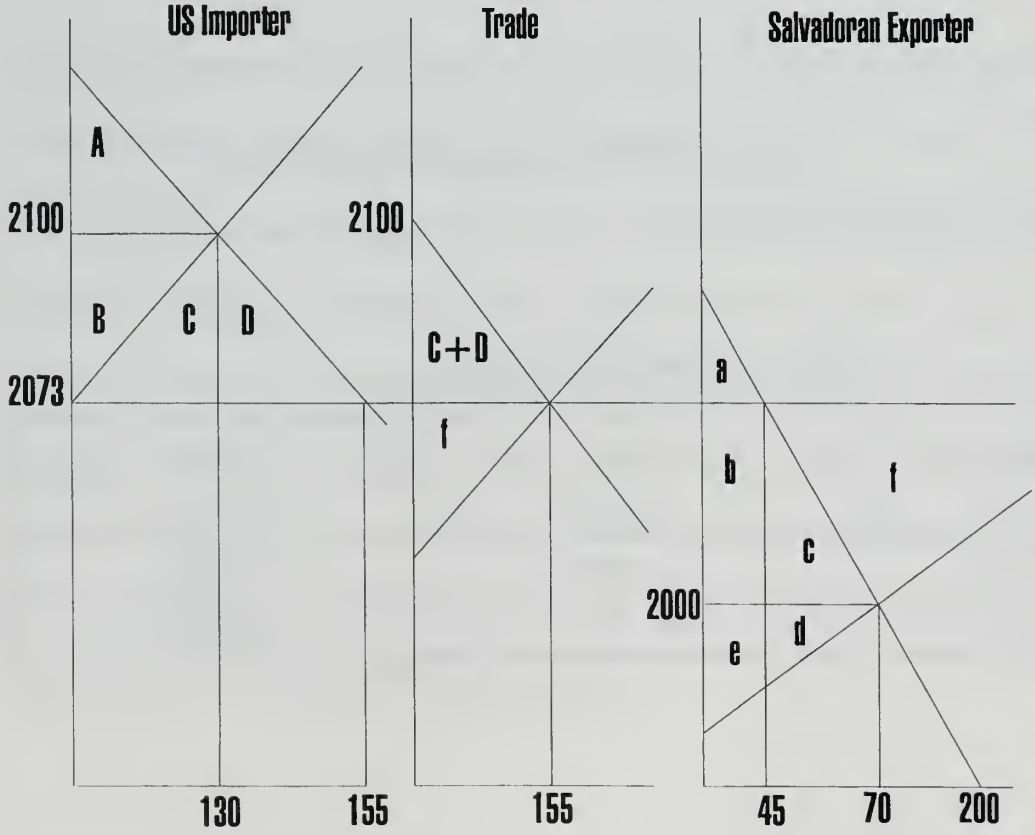

Figure 6. Analysis of Trade and Welfare.

From the graphical analysis it can be observed that the consumers surplus (CS) and producers surplus (PS) for both countries are as listed in Table 13.

Table 13. Salvadoran Welfare Analysis.

	W/O Trade	W/Trade	Net	Total($)
C.S.	a+b+c	a	(b+c)	-4,197.5
P.S.	e+d	b+c+f+e+d	b+c+f	9,855.0
Total	a+b+c+d+e	a+b+c+f+e+d	f	5,657.5

The computations are as follows:

C.S. = b+c = (2073-2000)*45 +.5*(2073-2000)*25 = $4,197.50

P.S. = f+b+c = .5*(2073-2000)*155 + 4,197.5 = $9,855.00

Total = $5,657.50

In conclusion, Salvadoran consumers lose a surplus equivalent to $4,197.50 as a result of the increase in the coffee price, that leads to a reduction in consumption by 10 tons of coffee. The coffee producers increase their surplus through an income transfer from consumers of $4,197.50, plus the increase in the domestic production of the export crop of 155 tons, equivalent to $5,657.50. As a whole, producers surplus increases by $9,855.0. Producers' welfare gains more than offset by the consumers' welfare losses. Therefore, from the production efficiency point of view, El Salvador as a whole benefits from trade.

In the case of the US, the opposite phenomenon occurs. The producers' surplus loss, equivalent to $1755, is transferred to the consumers. On the other hand, consumers receive not

only the transfer due to the increase in production efficiency, but also receive a surplus from the increase in consumption (area D) equivalent to $912.50. Hence, consumer gains are greater than producer losses, and there is a resulting net welfare gain for US as a whole, due to the increase in efficiency in the use of resources (see Table 14).

Table 14. US Welfare Analysis.

	W/O Trade	W/Trade	Net	Total($)
C.S.	A	A+B+C+D	B+C+D	3,847.5
P.S.	B	-	(B)	-1,755.0
Total	A+B	A+B+C+D	C+D	2,092.5

The computations are as follows:

C.S. = B+C+D= (2100-2073)*130 +.5*(2100-2073)*(155-130) = $3,847.50

P.S. = B = .5*(2100-2073)*130 =-$1,755.00

Total = $2,092.50

C. THE IMPACT OF THE DEFICIT ON DECISION MAKING

Above, Salvadoran and US gains and losses from trade were analyzed, with the conclusion that both countries benefit from trade. The focus now turns to the increasing trend in the Salvadoran trade deficit. Using the world prices of coffee and manufactured goods, $2,073 per ton and $629 per ton for the US and El Salvador, respectively, the ES trade balance is shown in Table 15.

Table 15. Salvadoran Balance of Trade.

Coffee/manufactured goods	Quantity(tons)	Value($)
Imports (manufactured goods)	560	(352,240)
Exports (coffee)	140	290,220
Trade Deficit	----	(62,020)

From this table, it can be observed that, even if trade benefits both countries under normal circumstances, it can produce a transitory negative effect, otherwise known as a trade deficit. For El Salvador, however, this has become a "steady state". Why, then, does this occur? To address this question, the obstacles that inhibit the automatic mechanisms which inherently move trade toward a balance will be analyzed. The measures used are interest and exchange rates.

1. Exchange Rate

When El Salvador imports manufactured goods, a supply of colones and a demand for dollars is created. When El Salvador exports coffee, a demand for colones and a supply of dollars is created. When imports exceed exports, a deficit is created. El Salvador needs to procure more dollars, to maintain the requirements of finance, than are required to procure the imported goods (see Figure 7).

In El Salvador's case, the deficit reflects a shift to the right in the demand for dollars. This will in turn increase the exchange rate of *colones* to dollars. This economic effect should adjust the trade deficit by diminishing the exchange value of the colon with respect to the dollar. The consequence will be that US goods will become more expensive in El Salvador and the

latter's goods will become cheaper in the US. This automatic mechanism should correct the trade imbalance.

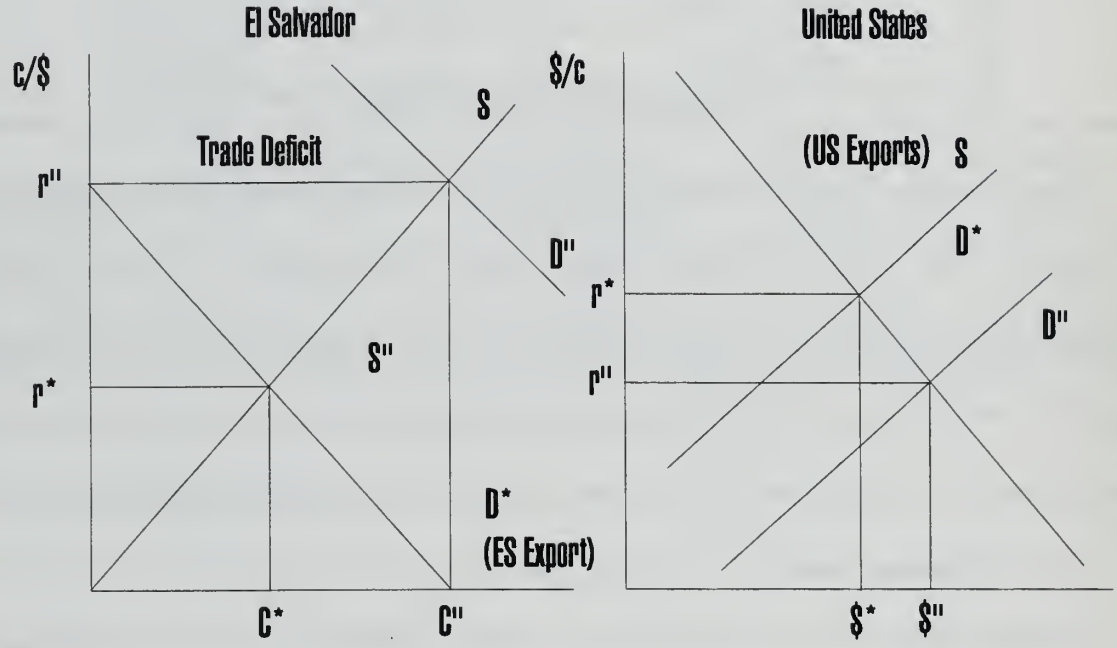

Figure 7. Exchange Rate Analysis of Currency as a Commodity.

As shown in the Table 16, the stabilization of the exchange rates from 1991 to 1995 does not correspond to the increasing deficit trend. This economic abnormality could be a result of the accelerated rate of migration from El Salvador to the United States during the war.

Table 16. Salvadoran Trade Deficit vs. Exchange Rates -- 1988-1995.
(Source: Central Bank of El Salvador)

Year	1988	1989	1990[5]	1991	1992	1993	1994	1995
Deficit	398	664	681	818	1,101	1,170	1,052	1,390
Rate	5.0	5.6	7.6	8.0	8.5	8.78	8.78	8.78

The deficit value is expressed in millions of U.S. dollars.

2. The Migration Effect

However, an external influence has occurred in El Salvador as a result of the civil war (1979-1991). The the migration of the E.S. labor force to the dollar supplier (US) has produced an inflow of dollars in the form of remittances; this is exogenous to the Salvadoran production system. According to the Central Bank of El Salvador, these remittances represent 13% of the country's total GDP. This significant external cash flow has prevented the exchange rates from adjusting automatically. Hence, there is no incentive for El Salvador to reduce consumption, and no pressure to increase productivity by improving the comparative advantage.

Table 17 shows that remittances covered at least 70% of the excess in demand for dollars produced by the trade deficit. This partly explains why the exchange rates have been almost stable while the deficit has been increasing.

Table 17. Salvadoran Remittances vs. Deficit.
(Source: El Salvador Central Bank)

Year	1990	1991	1992	1993	1994	1995
R/D ratio	1	.97	.78	.74	.92	.76
Remittances	719	790	858	864	963	1,061
Deficit	681	818	1,101	1,170	1,052	1,390

[5] In 1990, El Salvador's system of exchange was liberalized.

The apparently positive external influence (remittances) that increases the availability of goods, which in turn improves the standard of living in the short term, could lead to a crippling effect on the economy in the long run if remittances diminish. A trade deficit without remittances would produce an excess demand for dollars. The purchasing power of Salvadoran *colones* would automatically decrease, unless offset by US investment in El Salvador or other currency flows, reducing the consumption of foreign products. This would only allow Salvadorans to increase foreign consumption by increasing the value of exports. Therefore, when remittances are used to fund the consumption of non-durable goods, a long run inhibition to improve Salvadoran production will result.

If, however, remittances are directed into investment or savings, the result could be a healthy future economy. Hence, the chronic deficit and its future economic effects on the economy is an issue for decision makers.

D. EFFECTS OF THE PATTERN OF TRADE

El Salvador's long term agricultural export policy has driven the economy toward a specific trade pattern that has led to an inefficient use of resources. It is therefore interesting to examine whether Salvadorans are considering the opportunity cost of resources. This question will be answered by analyzing El Salvador's natural resources, labor and output mix.

El Salvador is a country with very few natural resources. The country's geographic extension is 8,260 square miles, of which 60% is cultivable. Agriculture is the dominant sector in the economy, accounting for 25% of the GDP, employing 40% of the work force, and contributing two thirds of total exports (Central America Economic Handbook). Considering the fact that the population is approximately 6 million (726 people per square mile), emphasis on a

land-intensive production process, is clearly inefficient. Moreover, agricultural exports are seasonal, engagement leading to seasonal employment and the added expense of a migratory workforce.

This agro-export policy breeds a low income population and does not utilize the opportunity cost of the labor force on a permanent employment basis. Consequently, the government has been forced to subsidize society, especially people under the poverty line, thus reducing revenues from individual taxes. Therefore, a long run reliance on agricultural exports has inhibited the opportunity to efficiently use El Salvador's labor resources. Labor is obviously El Salvador's most abundant resource. On the other hand, one of the most scarce and valuable resources in the country, land, has been used up in agricultural export production without analyzing alternative uses that might yield a higher ratio of marginal benefit to marginal cost.

The agricultural export production demands a very large and unskilled labor force, removing any incentive for the rural population to pursue education. This is clearly illustrated in the higher turnover ratio in primary schools (see Appendix F). This problem becomes critical in the sixth grade, where the turnover ratio is 40%. El Salvador's flexibility to diversify production in the long run may be limited due to lack of skilled manpower. This is a very big opportunity cost that has been overlooked by the policy makers; it threatens the country's prosperity in the future and takes away the possibility of changing the deficit trend.

Agriculture uses not only land and labor, but also competes for water, a resource that is becoming more scarce. The majority of residential areas only enjoy a water supply for a few hours a day. According to a recent World Bank study:

> Three-fourths of the territory is subject to severe soil erosion due to the encroachment of basic grains production on marginal lands by small farms, which

in turn results in reduced productivity and lower rural incomes. Only 12% of the land has forest cover, due to the use of fuel wood for cooking, particularly in rural areas (89 percent of households). The country suffers from seasonal water shortages and the quality of its water is deteriorating due to soil erosion, discharged of municipal sewage and industrial waste water. (World Bank)

The combined effects of the monopolistic style of agriculture and the lack of communications infrastructure has limited employee preferences and income maximization. Social dissatisfaction resulting from the inequitable distribution of wealth promted government action in the form of minimum wage laws beginning in 1978.

The effects of the government's increases in the official minimum wage are difficult to analyze. Table 18 shows unemployment rates and changes in the minimum wage over the period 1978-1994.

Table 18. Changes in Unemployment and the Minimum Wage.
(Source: FUSADES)

Year	Unemploy-ment rate[1]	Minimum Wage (cols.)	Min/Wage relative change	Min/Wage real change	
1978	-----	4.25	------	------	------
1985	*16.90%*	5.20	22%	-22%	Classic
1989	*9.40%*	14.00	25%	*25%*	Classic
1990	*9.96%*	14.00	15%	*5%*	-----
1991	*7.50%*	13.00	13%	*9%*	Classic
1992	*8.73%*	13.00	-----	-----	-----
1993	*9.40%*	14.00	8%	*9%*	Abnormal
1994	-----	16.50	18%	*18%*	-----

[1/]According to official sources more than 50% of the work force is underemployed in the informal sector of the economy.
[2/]Inflation base December 1978=100.

While changes in the actual minimum wage are apparent, discrepancies between relative and real increases in wages reveal the increases to be purely cosmetic. In some years, the discrepancy is severe; a 22% relative increase in the minimum wage between 1978 and 1985 yielded a real decrease of 22%.

Ceteris paribus, according to classical economic theory, increasing the minimum wage above the equilibrium point will increase unemployment, and vice-versa. In the case of El Salvador, however, unemployment has been influenced by a variety of internal and external factors, such as the impact of changing weather patterns on the agricultural industry, domestic unrest, and changes in the region's economic and political landscape. It is therefore difficult to ascribe changes in the unemployment rate to changes in the minimum wage level. According to El Salvador's Foundation For The Social and Economic Development (FUSADES), of the total working population, 50% are employed in the informal sector of the economy (FUSADES, 1994, p. 3), which further complicates the interpretation of unemployment data.

One must therefore be careful in using classical theory to explain the behavior of Salvadoran unemployment and minimum wage indicators. For instance, a 121% relative increase, corresponding to a 42% real increase, occured in minimum wages from 1985 to 1990 (see Figure 8). Over the same period, unemployment fell from 16.9% to 9.96%. This seems to contradict the classical view of the effect of an increase in the minimum wage, yet the flight of human capital that occured during the war period is a more likely explanation for the drop in unemployment. Similarly, while a 15% real increase in the minimum wage took place from 1991 to 1993, changes in unemployment were insignificant. The small variations in the

unemployment rate over that period are probably the result of reconstruction efforts and the demobilization beginning in 1993.

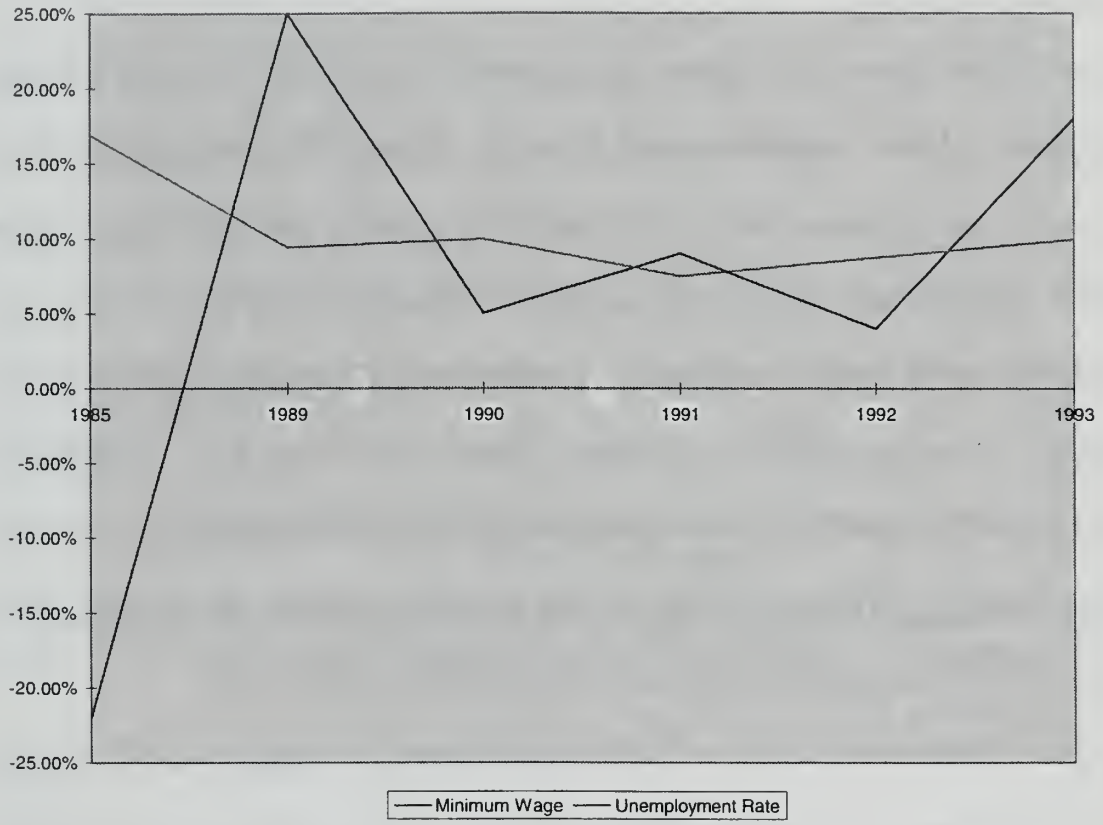

Figure 8. Unemployment and the Minimum Wage in the Post-War Period.

The effects of the war on unemployment in El Salvador cannot be understated. Before the civil war, abundant labor was available for the agricultural export firms. The labor supply curve can be characterized as infinitely inelastic. On the other hand, employer's demand for labor had a downward slope; a decline in wages led to an increase in the demand for labor. However, if the wages increased, a firm's supply of labor was not affected because they could

employ as much labor as they wanted without paying extra wages for it. During the war two major developments occurred:

- The destruction of infrastructure and the outflow of capital due to political instability increased the pitch of the employers demand curve, thus shrinking the demand for labor.
- The exodus of labor from the areas of conflict to the US caused a shrinking in the supply of labor.

Figure 9 illustrates the coincidence of these occurences on the Salvadoran labor market.

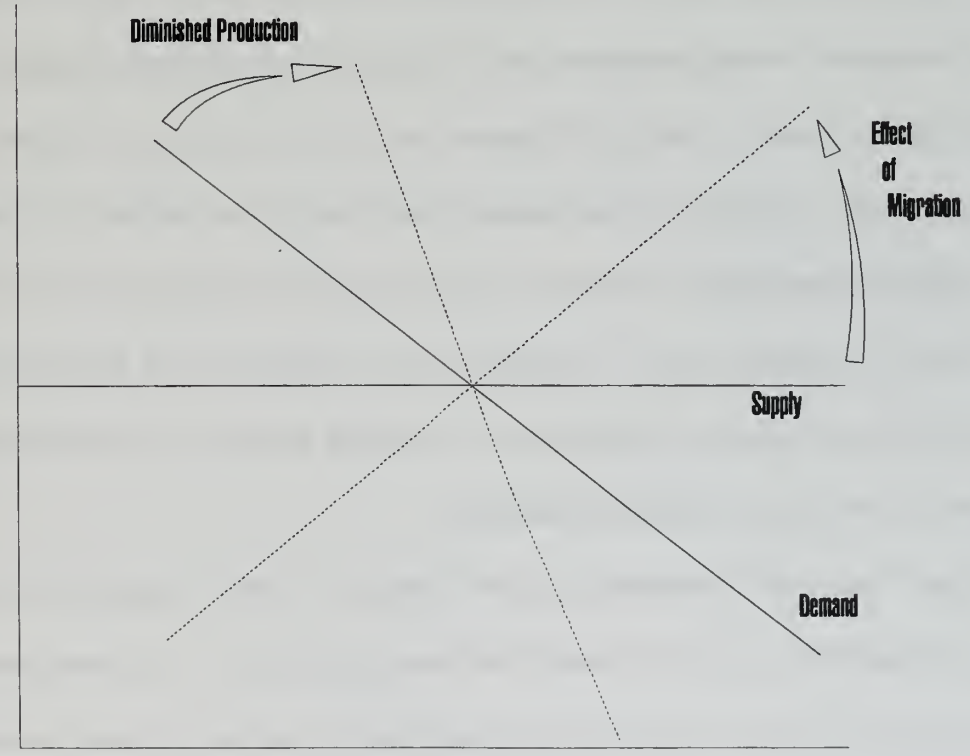

Figure 9. Labor Market During the War.

Government intervention in setting minimum wages has not resulted in a redistribution of wealth. The inequities caused by the country's agricultural export dominated pattern of trade remain a cause of concern despite steady increases in the minimum wage. Additionally, the effect of minimum wage legislation on unemployment is difficult to justify or condemn, due to the presence of the large informal sector of the economy, but the lack of evidence for a positive impact, and the fact that government intervention only moves the economy away from a free-market system, seem to indicate a long-run negative effect.

E. GOVERNMENT INTERVENTION

According to the prior analysis of the negative short run externalities, it can be concluded that the government should intervene to decrease the trade deficit and its negative effects. At present the government provides incentives such as subsidies and preferential interest rates for loans to agricultural exporters. This policy improves profits of a small number of firms, but fails to redistribute income. Therefore, the government should remove the ineffective incentives. A regulatory system that encourages production in agriculture (the exporting sector) to the point where the ratio of marginal benefit to marginal cost is equal across all activities would be preferable. Incentives to increase minimum wages should be avoided, to discourage premature incorporation of youth into the agricultural labor force.

The large land areas demanded by export crops have almost extinguished food crop production. In fact, 25% of imports involve food (see Appendix G). The government should therefore encourage food crop production that utilizes highly intensive cultivation methods. This in turn would increase food supplies at competitive prices, improving standards of living despite low wages.

Encouragement, even to the point of subsidy, should be provided to those industries that demand highly skilled workers. This would encourage higher education and diversification of labor, especially where the comparative advantage is greatest.

The present chapter has analyzed the trade deficit, and its short and long term effects. The problem has been examined through different perspectives, to show the complexity and the significance of the problem. In the next chapter, findings from the research to this point will be used to discuss future economic possibilities in El Salvador.

VI. THE CURRENT ECONOMIC PICTURE

This chapter will analyze the strengths, weaknesses, threats and opportunities in El Salvador's economy today. The analysis will consider both short and long term perspectives.

A. THE ECONOMIC STRENGTHS

El Salvador has a number of key short term strengths. While some of these factors may be less than optimum, and therefore undesirable in the long term, they nevertheless provide necessary support in the current economic environment. The first of these strengths are centered around the availability of labor.

First, the level of labor flexibility in the economy could allow for a natural shift to a more diversified production system without worsening the unemployment situation. Second, the phenomenon of export labor, while not a viable long-term solution, is releasing pressure on exchange rates and lessening inflationary effects. Remittances from the estimated 20% of Salvadorans who work abroad account for 13% of the country's GDP, and provide for 70% of foreign exchange.

Another strength in the current situation is El Salvador's favorable credit record. Even in the worst of economic (and political) times, the country has managed to service the external debt. This will be another factor at work in the task of bringing external investment into El Salvador, along with the fact that the Salvadoran economy has exhibited low inflation over the past six years.

The growth of the industrial manufacturing sector has created jobs that are reducing unemployment. The low wages paid are indicative of the country's inability to support growth

unaided, but the mere existence of jobs has eased public dissatisfaction. This has been of enormous benefit in the short term by enhancing immediate political stability.

In the long term, however, it is the people of El Salvador that are its greatest strength. They are the only abundant resource available for conversion into an asset. Another long-term strength is to be found in the series of legal reforms that have taken place in recent years. Changes in property rights laws are making it possible to procure and securely maintain private property; this is necessary to form the infrastructure for development. Additional reductions in the costs of establishing new firms and in trade restrictions are also promoting capital investment.

B. THE ECONOMIC WEAKNESSES

The most immediate, and perhaps most severe, weakness of the current economy is the wound left by the country's history. As noted in earlier chapters, the lack of a truly representative national interest throughout the country's history has continually created obstacles to economic development. The first signs of a national vision were found in the successful effort to establish and maintain peace; Salvadorans have much to learn about each other before a cohesive national vision exists. Beyond the lack of historical representation, however, the years of authoritarian rule (whether on the part of government or insurgents) have left many people with an abiding distrust of leadership; they are disposed to question the credibility of those who are responsible for leading the country to development.

One weakness that cannot be changed is El Salvador's lack of natural resources. It need not be a long-term problem, given the availability of external capital to develop industry. Unfortunately, low resource levels equate to higher development costs, and this exacerbates the

lack of available capital. Similarly, a comparatively high level of human capital is also desirable in overcoming the lack of natural resources, but human capital accumulation is a long-term process. It will be some time before El Salvador can expect any current or future human capital investment to pay off. In light of these two resource deficits, and the fact that only additional capital will overcome the barriers to development, the absence of capital becomes the country's greatest present weakness.

The absence of capital resurfaces again and again as an obstacle to development. The country's war-crippled infrastructure continues to frustrate government and business development efforts. All of the available funds are consumed in restoration of roads, bridges, communications networks, and a variety of services essential to the conduct of business and industry to pre-war functionality. Expanding the coverage and level of service is beyond the capability of the economy in its present state.

Another short term weakness is the continuing existence of subsidies. Progress toward a free market system has been retarded to maintain social order; an outright repeal of subsidies would create widespread public discontent at the present time. It is hoped that a peaceful transition to a free market can be achieved in the mid-term.

A long-term weakness that is immediately apparent is the product of, and closely related to, the historical lack of a truly national interest in El Salvador. Capitalists in El Salvador are not accustomed to viewing operations from the workers' perspective. In an agricultural export economy dependent on unskilled, seasonal labor, this is possible. As the need arises for more skilled labor, however, so will the competition for employees, with the result that the business and industrial cultures of El Salvador will have to be more accommodating to workers' needs.

This need for change extends to the country's political structures as well. El Salvador's historical style of leadership has been to confront the manifestations of problems with violent repression instead of real solutions. The principal source of discontent among Salvadorans has been and continues to be the poor distribution of income. None of the solutions to this problem are short-term propositions, however, and the ability of the country as a whole to be patient will substantially affect overall stability for some time to come.

Another problem that poses long-term repercussions is the fact that the law of comparative advantage has been ignored throughout El Salvador's economic history. This has resulted in a low level of production, to which business and industry have become accustomed. This is compounded by the presence of what can be called "artificial consumption", whereby remittances from the external workforce fund a standard of living for some of the population that is in excess of what their unskilled labor can command in the market. As a result, there is limited incentive to improve skills has developed. This presents an additional weakness to be confronted in the long term.

C. THE ECONOMIC THREATS

A threat which must be considered in the short term is the possibility of an increased US domestic anti-immigration policy. This could reduce by up to 67% the remittances inflow from the external workforce, creating a 10% percent reduction in the country's GDP. Furthermore, the deportation of Salvadorans living illegally in the US could rapidly increase El Salvador's population (by as much as 14%).

Additionally, political stability has not been consolidated. Institutional inefficiency provides opportunity to the forces opposed to democracy. The inability of both government and

the political parties to solve problems could easily become the main source of instability. Social conditions are unacceptably low for at least 60% of the total population. This could become a source of desperation in the near future.

The fixed pattern in the country's policies and their consequences, given the inefficiencies in resource allocation, could mean that the country is heading toward conditions reminiscent of the early 1980's. It is difficult to make this judgment, however, given the changes that have already taken place.

Over the long term, several items stand out as threats to development. The country's trade pattern has lead to a constantly increasing deficit. This problem could cripple the economy in the long run. There has been a disturbing rise in delinquency over the past five years. As mentioned previously, this has a tendency to create internal insecurity that is unattractive to potential foreign investors. Accelerated population growth is increasing scarcity in the country, leading to an increase in social problems such as delinquency, drugs, prostitution, and various criminal acts. Beyond the social decay exhibited by such problems, there are threats to development in the form of productivity and efficiency losses.

El Salvador's environment is vulnerable. The style of agriculture has not considered the value of land and water in El Salvador. As a result, there has been widespread deforestation and destruction of water resources that will increase the ecological problems in the future. This environmental threat can be expected to have further economic and social ramifications.

The lack of private investment taking place in El Salvador, as discussed earlier, indicates that reductions in production may be anticipated in the future. If El Salvador's real growth were the same as the population growth, stagnation of the economy would occur. While remittances

play a supportive role in the short term, ties between generations of immigrants to the home country will likely erode (perhaps in the next two generations), reducing GDP and having corresponding effects on the trade deficit.

D. ECONOMIC OPPORTUNITIES

An opportunity exists because the state still owns a variety of ongoing concerns. Continued privatization would provide additional monetary resources with which to continue the government's programs. These programs involve technical assistance, land transfer, internal security, and educational infrastructure. It might also be possible to improve the standard of living at the poorest levels of Salvadoran society by creating incentives to grow food crops.

The availability of cash remittances from Salvadorans outside the country presents an opportunity to encourage investment and savings by the recipients of funds. Additionally, much could be done to capitalize on the fact that so many Salvadorans work abroad to stimulate, for example, tourism.

A long-term opportunity exists today to begin investing in human capital to support El Salvador's development. Additionally, there is an opportunity to benefit in the long term from the ability of El Salvador to manage scarce resources. All of these opportunities, however, will only exist as long as political stability is maintained.

VII. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

El Salvador is a living example of a country that has not developed a vision to follow over the long term. Its lack of a representative national interest has condemned the country to remain underdeveloped. There are several primary factors preventing the country from changing its inefficient production system.

First, the agricultural export sector produces only 25% of the country's GDP, but demands 40% of the labor force and 100% of the cultivable land (60% of the total territory). Additionally, seasonal engagement of the agricultural labor force leads to low productivity, low income, and an unskilled labor force. The effect of these negative impacts of the agricultural sector are compounded by an historically low investment in human capital that has inhibited the country's ability to shift production in the short term. The inadequate distribution of income has kept the majority of Salvadorans to a very low standard of living, and has produced political instability.

Short term political stabilization depends on El Salvador's ability to obtain external economic assistance. In the long term, however, political stability depends on the match of the economic policy and the country's resources, including human capital. Twenty percent of El Salvador's population is outside the country (90% of this external population is in the United States). Remittances from Salvadorans in the US constitute 13% of the country's GDP and represent 70% of the foreign currency inflow, which has prevented the exchange rates from

adjusting automatically. There is therefore no incentive for the country to reduce consumption and no pressure to increase productivity by improving El Salvador's comparative advantage.

If the actual conditions of El Salvador's external environment remain unchanged, rapid growth will continue in a similar trend seen in the country for the last six years. However, there is no reason to believe that the population's standard of living will be improved, given the low levels of investment in development.

B. RECOMMENDATIONS

While it is beyond the scope of this thesis to recommend specific policy measures to the government of El Salvador, it is useful to review the major areas of consideration around which it is presumed such policy would be formed. Results of research and analysis presented earlier allow several areas to be discussed.

Historically, the interest of the country's leadership has been that of the few over the majority. Development will require El Salvador to develop a vision that can be shared by every one of her citizens. Development itself should take place through policies based on the people, the most valuable abundant resource that the nation possesses.

The apparently positive effect of remittances from abroad must be seen to improve the standard of life in the short term, and consideration must be given to measures designed to reduce dependence on remittances, and to be prepared for the eventual evaporation of them altogether. One positive step to take advantage of the current level of remittances is to encourage investment or savings. A preventative measure in this area, as well as a step on the road to development, would be to shift production to areas of comparative advantage, such as those with labor intensive,

low capital, and low technology requirements. In this event, eventual loss of external remittances could be tolerated without a corresponding increase in the trade deficit.

Government intervention to decrease the trade deficit should be limited to removing the ineffective incentives (such as subsidies) offered to inefficient production activity. It should also consider a regulatory system that encourages production in the sectors where the ratio of marginal benefit over marginal cost is equal across all activities. Regardless of the trade deficit's negative effects, El Salvador obtains welfare gains from trading. Trade should therefore be encouraged in a way that follows the law of comparative advantage to improve productivity.

The social conditions endured by the majority of Salvadorans in the past has led to civil war. Such recent historical evidence of dissatisfaction justifies government policy that is aimed at improving the standard of living. Income distribution is still a thorny issue that could spark internal conflict in El Salvador, and it therefore needs special immediate attention. El Salvador's democratization process has to include a economic redefinition of the country, that leads to abundance first and then to development. In all of these actions, however, the government should remain as a provider and avoid interventionist approaches to economic issues; they should allow market forces to dictate events. The Government should not increase the minimum wage, to avoid prematurely incorporating youth into the agricultural labor force. Higher minimum wages reduce the incentive to pursue education. Education contributes to a skilled labor force in the long term. 25% of imports are devoted to satisfying the demand for food. Encouraging of food crop producers that utilize highly intensive cultivation methods would improve the trade situation by lowering the reliance on imported food. This in turn would increase availability of goods at competitive prices resulting in improved standards of living, even if there are low wages. The government should

subsidize those industries that demand highly skilled workers to encourage higher education and therefore diversification of labor into other sectors of the economy, especially where the comparative advantage is greatest.

LIST OF REFERENCES

Center for Information, Documentation and Research Support, Central America University, San Salvador, El Salvador, ***PROCESO***, February 15,1995.

Peter D. Fraser and Mark Payne, *Central American Economic Handbook*, Euromonitor Publications Limited, First Edition, 1987.

Banco Central de Reserva, *Economic Study of El Salvador*, March, 1994.

Salvadorean Foundation for the Economic and Social Development (FUSADES), *El Salvador Strategy 94-99*, 1994.

World Bank, "El Salvador The Challenge of Poverty Alleviation," June 9, 1994.

North, Lisa *Roots of revolt in El Salvador*, Lawrence Hill & Co. (Dumont Press Graphics), 1985.

Brockett, Charles D., *Land, Power and Poverty, Agrarian Transformation and Political Conflict in Central America*, 1988.

Wallich, Henry C. and Adler, John H., "El Salvador-A Case Study," *Public Finance in a Developing Country*, Harvard University Press, Cambridge, Massachusetts, 1951.

World Bank, "El Salvador: Meeting the Challenge of Globalization", October 13, 1995.

BIBLIOGRAPHY

Baloyra, Enrique A., *El Salvador in Transition*, University of North Carolina Press, North Carolina, 1982.

Barry, Tom, *El Salvador: A Country Guide*, Inter-Hemispheric Education Resource Center, New Mexico, 1991.

Barry, Tom, *El Salvador The Other War*, Inter-Hemispheric Education Resource Center, New Mexico, 1986.

Blutstein, Howard I., *Area Handbook for El Salvador*, American University, Washington DC, 1971.

Browning, David, *Conflicts in El Salvador*, St. Cross College, Oxford, 1986.

Buckley, Tom, *Violent neighbors, El Salvador, Central America and the United States*, Time Books, New York, 1984.

Central America Recovery and Development Task Force, *Central America Recovery and Development*, Duke University Press, Durham and London, 1989.

Consulta 95, *Reforma Educativa en Marcha,* Ministerio de Educacion, El Salvador, 1995.

Cox, Ronald W., *Power and Profits, US Policy in Central America*, The University Press of Kentucky, 1994.

Departamento Estadistico, *Estadisticas Educativas de El Salvador,* Ministerio de Educacion, 1994 & 1995.

Ducoff, Louis J., *Human Resources of Central America, Panama and Mexico in Relation to Some Aspects of Economic Development 1950-1980*, United Nations Economic Commission for Latin America, 1960.

FUSADES, *Como Esta Nuestra Economia?*, San Salvador, 1992.

FUSADES, *Indicadores Seleccionados del Desarrollo Social de El Salvador*, Departamento de Estudios Economicos y Sociales, August, 1995.

Gerencia de Estudios Economicos, *Informe Economico 1993*, Banco Central de Reserva, San Salvador, 1994.

Gerencia de Esutudios y Politica Economica, Indicadores Economicos a Corto Plazo, Banco Central de Reserva, San Salvador, 1995.

Gettleman, Marvin E., *El Salvador: Central America in the New Cold War*, Grove Press, Inc., New York, 1981.

World Bank, *El Salvador Demographic Issues and Prospects*, Washington DC, 1979.

Gwartney, James D. and Stroup, Richard L., *Macroeconomics: Public and Private Choice*, The Dryen Press Harcourt Brace College Publishers, Seventh Edition.

World Bank, *El Salvador The Challenge of Poverty Alleviation*, Washington DC, June 9, 1994.

World Bank, *El Salvador Meeting the Challenge of Globalization*, Washington DC, October 13, 1995.

Ministerio de Educacion, *Memoria de Labores*, Ministerio de Educacion, El Salvador, 1989, 1992, 1995.

Ministerio de Planificacion, *Indicadores Economicos y Sociales*, Direccion de Informacion, San Salvador 1986, 1990, 1991.

APPENDIX A. NATIONAL EXPENDITURES IN EL SALVADOR: 1976-1995

EXPENDITURES BY PRIMARY ORGANIZATION UNITS
PERIOD 1976-1985

	Pre-war period			War period						
Primary organization units	**1976**	**1977**	**1978**	**1979**	**1980**	**1981**	**1982**	**1983**	**1984**	**1985**
Legislative Branch	0.25%	0.23%	0.23%	0.21%	0.06%	0.05%	0.11%	0.30%	0.28%	0.31%
Judicial Branch	1.32%	1.29%	1.08%	0.93%	1.01%	1.01%	0.94%	0.86%	0.77%	1.12%
Accounting Department	0.47%	0.41%	0.40%	0.46%	0.45%	0.41%	0.37%	0.36%	0.32%	0.37%
Electoral Court	0.16%	0.13%	0.14%	0.06%	0.12%	0.05%	0.19%	0.06%	0.06%	0.19%
Civil Service Court	0.02%	0.02%	0.02%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%
Investigation Bureau	0.19%	0.17%	0.21%	0.40%	0.39%	0.13%	0.16%	0.11%	0.10%	0.13%
Child Support	0.25%	0.24%	0.26%	0.27%	0.26%	0.21%	0.22%	0.17%	0.16%	0.18%
Human Rights	---	---	---	---	---	---	---	---	---	---
Executive Branch	2.95%	1.98%	1.14%	1.10%	0.95%	0.80%	0.76%	0.73%	0.70%	0.63%
Ministry of Planning	0.00%	1.35%	0.99%	1.63%	2.44%	4.83%	3.54%	1.90%	1.81%	0.70%
Ministry of Treasury	8.30%	7.70%	7.84%	8.04%	7.36%	8.08%	7.19%	5.64%	5.44%	6.22%
Ministry of External Affairs	0.81%	0.97%	0.75%	0.66%	0.72%	0.65%	0.63%	0.61%	0.55%	0.55%
Ministry of Internal Affairs	1.91%	2.78%	3.29%	2.79%	2.93%	2.16%	2.60%	2.14%	1.89%	2.01%
Internal Security Secretary	2.16%	2.59%	2.55%	3.14%	4.39%	5.58%	5.75%	5.89%	5.97%	6.36%
Ministry of National Defense	4.99%	5.17%	5.89%	5.62%	6.30%	9.02%	11.72%	13.21%	17.33%	21.44%
Ministry of Justice	1.82%	1.69%	1.66%	1.82%	1.90%	1.70%	1.32%	1.09%	1.00%	1.01%
Ministry of Communication	---	---	---	---	---	---	---	---	---	---
Ministry of Education	25.59%	24.90%	23.16%	20.21%	25.18%	21.07%	18.09%	16.85%	15.35%	17.17%
Ministry of Welfare	12.32%	11.28%	11.89%	10.17%	10.21%	8.99%	8.49%	8.68%	8.71%	8.14%
Ministry of Work	0.73%	0.71%	0.72%	0.75%	1.15%	0.66%	0.76%	0.50%	0.68%	0.46%
External Commerce Ministry	---	---	---	---	---	---	0.17%	0.16%	0.29%	0.22%
Ministry of Economy	6.18%	5.06%	6.74%	12.36%	7.94%	6.94%	3.82%	4.64%	2.02%	1.16%
Ministry of Agriculture	9.94%	8.91%	8.20%	6.86%	7.25%	6.86%	10.95%	7.68%	6.44%	6.82%
Public Development Ministry	14.26%	16.70%	17.50%	16.53%	13.90%	12.59%	11.08%	11.02%	10.09%	10.31%
Housing Development Ministry	---	---	---	---	---	---	---	---	---	---
Transference Provision	---	---	---	---	---	---	---	---	---	---
Total	94.63%	94.26%	94.63%	94.03%	94.94%	91.82%	88.85%	82.58%	79.87%	85.42%
National Debt Service	5.37%	5.74%	5.37%	5.97%	5.06%	8.18%	11.15%	17.42%	20.13%	14.58%
Grant total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Annual Salvadoran budget laws.

EXPENDITURES BY PRIMARY ORGANIZATION UNITS
PERIOD 1986-1995

	War period							Post-war period		
Primary organization units	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**
Legislative Branch	0.33%	0.27%	0.28%	0.27%	0.36%	0.38%	0.50%	0.55%	0.62%	0.69%
Judicial Branch	1.01%	0.91%	1.24%	1.61%	1.75%	2.06%	2.67%	3.16%	3.65%	4.32%
Accounting Department	0.35%	0.32%	0.34%	0.32%	0.54%	0.46%	0.70%	0.60%	0.62%	0.61%
Electoral Court	0.05%	0.05%	0.33%	0.45%	0.35%	0.41%	0.16%	0.37%	0.41%	0.30%
Civil Service Court	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
Investigation Bureau	0.12%	0.10%	0.12%	0.12%	0.15%	0.19%	0.15%	0.21%	0.20%	0.50%
Child Support	0.16%	0.16%	0.17%	0.16%	0.18%	0.19%	0.18%	0.23%	0.24%	0.32%
Human Rights	---	---	---	---	---	---	---	---	---	---
Executive Branch	0.58%	0.56%	0.54%	0.51%	0.74%	0.97%	0.72%	2.48%	5.36%	1.31%
Ministry of Planning	0.56%	0.85%	0.82%	0.60%	0.46%	0.29%	0.18%	0.18%	0.16%	0.18%
Ministry of Treasury	5.87%	9.48%	5.90%	5.65%	7.60%	10.92%	6.87%	10.13%	10.56%	11.21%
Ministry of External Affairs	0.51%	0.83%	0.88%	0.99%	1.19%	2.05%	1.52%	1.40%	1.16%	1.25%
Ministry of Internal Affairs	0.92%	1.13%	1.41%	2.00%	1.99%	2.40%	2.40%	1.91%	1.56%	1.49%
Internal Security Secretary	6.70%	5.58%	6.10%	5.84%	5.79%	4.95%	3.42%	3.35%	1.99%	7.37%
Ministry of National Defense	21.60%	20.33%	22.05%	20.88%	20.48%	17.82%	13.71%	11.35%	9.04%	9.09%
Ministry of Justice	0.99%	0.96%	1.00%	0.96%	1.08%	1.06%	1.02%	1.18%	0.89%	1.02%
Ministry of Communication	---	---	---	---	---	---	---	---	---	---
Ministry of Education	15.29%	14.53%	15.71%	15.33%	16.63%	15.36%	13.74%	14.49%	14.67%	14.94%
Ministry of Welfare	7.10%	8.32%	8.24%	8.05%	8.86%	8.12%	7.84%	9.56%	9.20%	10.25%
Ministry of Work	0.43%	0.40%	0.40%	0.41%	0.39%	0.34%	0.28%	0.24%	0.21%	0.21%
External Commerce Ministry	0.17%	0.15%	0.16%	0.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Ministry of Economy	0.85%	0.84%	0.85%	2.11%	1.21%	1.19%	1.24%	1.25%	0.97%	0.85%
Ministry of Agriculture	5.96%	5.01%	4.92%	5.13%	5.24%	5.33%	3.40%	3.14%	2.64%	3.28%
Public Development Ministry	9.99%	8.30%	8.45%	8.72%	11.56%	10.97%	10.47%	12.93%	13.40%	10.18%
Housing Development Ministry	---	---	---	---	---	---	---	---	---	---
Transference Provision	---	---	---	---	---	---	---	---	---	---
Total	81.50%	82.20%	81.91%	82.13%	86.52%	85.41%	71.04%	79.16%	77.97%	79.85%
National Debt Service	18.50%	17.80%	18.09%	17.87%	13.48%	14.59%	28.96%	20.84%	22.03%	20.15%
Grant total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Annual Salvadoran budget laws.

APPENDIX B. DEFENSE, DEVELOPMENT, AND DEBT EXPENDITURES: 1965-1995

EXPENDITURES BY PRIMARY ORGANIZATION UNITS
PERIOD 1965-1985

			Pre-War period			War period						
Expenditures	**1965**	**1970**	**1976**	**1977**	**1978**	**1979**	**1980**	**1981**	**1982**	**1983**	**1984**	**1985**
National Defense	**12.06%**	**12.81%**	**9.06%**	**10.54%**	**11.72%**	**11.56%**	**13.62%**	**16.77%**	**20.07%**	**21.25%**	**25.20%**	**29.80%**
Development	**75.77%**	**74.33%**	**85.58%**	**83.74%**	**82.92%**	**82.48%**	**81.32%**	**75.05%**	**68.82%**	**61.41%**	**54.79%**	**55.70%**
Education and Training	21.24%	28.04%	25.59%	24.90%	23.16%	20.21%	25.18%	21.07%	18.09%	16.85%	15.35%	17.17%
International Affairs	1.73%	1.72%	0.81%	0.97%	0.75%	0.66%	0.72%	0.65%	0.63%	0.61%	0.55%	0.55%
Health and Welfare	11.12%	14.52%	13.05%	11.99%	12.61%	10.92%	11.37%	9.65%	9.25%	9.18%	9.39%	8.60%
Community Development	10.89%	9.24%	14.26%	16.70%	17.50%	16.53%	13.90%	12.59%	11.08%	11.02%	10.09%	10.31%
Agriculture	10.49%	4.51%	9.94%	8.91%	8.20%	6.86%	7.25%	6.86%	10.95%	7.68%	6.44%	6.82%
Commerce and Transportation	7.65%	2.51%	6.18%	5.06%	6.74%	12.36%	7.94%	6.94%	3.99%	4.80%	2.31%	1.38%
General Government	12.66%	13.80%	15.74%	15.22%	13.97%	14.94%	14.97%	17.28%	14.82%	11.25%	10.65%	10.88%
Total Expenditures	87.83%	87.14%	94.63%	94.28%	94.64%	94.04%	94.95%	91.83%	88.88%	82.66%	79.98%	85.50%
National Debt	12.17%	12.86%	5.37%	5.72%	5.36%	5.96%	5.05%	8.17%	11.12%	17.34%	20.02%	14.50%
Grant total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Annual Salvadoran budget laws.

EXPENDITURES BY PRIMARY ORGANIZATION UNITS
PERIOD 1986-1995

	War period							Post-War period		
Expenditures	**1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**
National Defense	**29.22%**	**27.03%**	**29.56%**	**28.72%**	**28.25%**	**25.17%**	**19.52%**	**16.61%**	**12.59%**	**17.95%**
Development	**52.38%**	**55.24%**	**52.43%**	**53.48%**	**58.31%**	**60.29%**	**51.66%**	**62.67%**	**65.52%**	**62.04%**
Education and Training	17.33%	16.48%	17.77%	17.26%	16.63%	15.36%	13.74%	14.49%	14.67%	14.94%
International Affairs	0.51%	0.83%	0.88%	0.99%	1.19%	2.05%	1.52%	1.40%	1.16%	1.25%
Health and Welfare	7.54%	8.71%	8.64%	8.46%	9.25%	8.46%	8.12%	9.80%	9.41%	10.46%
Community Development	9.99%	8.30%	8.45%	8.72%	11.56%	10.97%	10.47%	13.34%	13.72%	10.54%
Agriculture	5.96%	5.01%	4.92%	5.13%	5.24%	5.33%	3.40%	3.14%	2.64%	3.28%
Commerce and Transportation	1.03%	0.99%	1.01%	2.27%	1.21%	1.19%	1.24%	1.25%	0.97%	0.85%
General Government	10.03%	14.92%	10.76%	10.66%	13.23%	16.94%	13.17%	19.25%	22.95%	20.71%
Total Expenditures	81.59%	82.27%	81.99%	82.21%	86.56%	85.46%	71.19%	79.28%	78.11%	79.99%
National Debt	18.41%	17.73%	18.01%	17.79%	13.44%	14.54%	28.81%	20.72%	21.89%	20.01%
Grant total	100.00 %	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00 %

Source: Annual Salvadoran budget laws.

APPENDIX C. GROSS DOMESTIC PRODUCT

GDP at Factor Cost
(Millions of 1987 Salvadoran Colones)

Year	Agriculture	Industry	Services	GDP
1972	2,875	4,387	12,392	19,654
1973	2,925	4,585	13,113	20,623
1974	3,225	4,854	13,887	21,966
1975	3,427	5,362	14,351	23,140
1976	3,157	5,674	15,171	24,002
1977	3,271	6,248	15,882	25,401
1978	3,729	6,445	16,922	27,096
1979	3,863	6,263	16,538	26,664
Average	**3,309**	**5,477**	**14,782**	**23,568**
% (*)	**14.0%**	**23.2%**	**62.7%**	
1980	3,662	5,542	15,197	24,401
1981	3,428	4,981	13,997	22,406
1982	3,268	4,633	13,266	21,167
1983	3,164	4,745	13,399	21,308
1984	3,269	4,773	13,741	21,783
1985	3,234	4,964	14,094	22,292
1986	3,133	5,089	14,313	22,535
1987	3,198	5,291	14,652	23,141
1988	3,168	5,476	14,931	23,575
1989	3,183	5,607	15,028	23,818
1990	3,420	5,667	15,444	24,531
1991	3,418	6,001	16,069	25,488
1992	3,667	6,396	17,505	27,568
Average	**3,324**	**5,320**	**14,741**	**23,386**
% (*)	**14.2%**	**22.8%**	**63.0%**	

Source: World Tables 1994, World Bank, pp. 153,252.
* : % of total expenditure

APPENDIX D. EXPENDITURE APPROACH ANALYSIS

GDP Structure
(Millions of 1987 Salvadoran Colones)

Year	Private (Personal)	Consumption General Government	Domestic Investment	Domestic Absorption	Net Export	Gross Domestic Product
1972	16,694	1,679	2,544	20,917	(1,263)	19,654
1973	17,929	1,873	3,298	23,100	(2,476)	20,624
1974	18,431	1,800	4,156	24,387	(2,422)	21,965
1975	18,963	1,958	3,732	24,653	(1,514)	23,139
1976	20,823	2,266	4,131	27,220	(3,219)	24,001
1977	23,274	2,379	5,930	31,583	(6,182)	25,401
1978	23,970	2,640	6,102	32,712	(5,616)	27,096
1979	22,422	2,706	4,706	29,834	(3,171)	26,663
Average	**20,313**	**2,163**	**4,325**	**26,801**	**(3,233)**	**23,568**
% (*)	**75.8%**	**8.1%**	**16.1%**		**-12.1%**	
1980	20,480	2,555	3,200	26,235	(1,835)	24,400
1981	18,732	2,645	3,076	24,453	(2,048)	22,405
1982	17,055	2,634	2,763	22,452	(1,285)	21,167
1983	17,285	2,661	2,528	22,474	(1,166)	21,308
1984	17,894	2,789	2,603	23,286	(1,504)	21,782
1985	18,572	2,977	2,458	24,007	(1,716)	22,291
1986	18,568	3,089	2,986	24,643	(2,108)	22,535
1987	18,744	3,181	2,861	24,786	(1,645)	23,141
1988	18,951	3,261	3,390	25,602	(2,026)	23,576
1989	19,252	3,222	4,274	26,748	(2,931)	23,817
1990	19,687	3,252	3,027	25,966	(1,435)	24,531
1991	20,172	3,394	3,708	27,274	(1,786)	25,488
1992	20,700	3,400	4,579	28,679	(2,111)	26,568
Average	**18,930**	**3,005**	**3,189**	**25,123**	**(1,815)**	**23,308**
% (*)	**75.3%**	**12.0%**	**12.7%**		**-7.2%**	

Source: World Tables 1994, World Bank, pp. 153,252.
* : % of the Domestic Absorption

Gross Domestic Product Structure
(Thousands of Salvadoran Colones)

Expenditure:	1988	1989	1990	1991	1992
PERSONAL CONSUMPTION	80.95%	82.93%	88.00%	87.51%	88.45%
- Durable goods	0.79%	0.74%	0.81%	0.67%	0.83%
- Non-durable goods	60.97%	62.22%	66.24%	55.85%	55.78%
- Services	19.19%	19.97%	20.95%	30.99%	31.84%
GROSS PRIVATE INVESTMENT	9.69%	11.84%	9.55%	11.29%	12.44%
. Fixed Investment	9.53%	9.83%	9.51%	10.94%	12.30%
- Means of Production	6.11%	6.44%	6.13%	7.48%	8.82%
Agriculture	0.19%	0.21%	0.25%	0.31%	0.36%
Industry	1.91%	1.76%	1.98%	2.47%	2.84%
Communication	2.94%	3.22%	2.85%	3.68%	4.10%
Others	1.07%	1.26%	1.06%	1.02%	1.52%
- Construction	3.42%	3.39%	3.38%	3.45%	3.48%
Residential	2.35%	2.61%	2.73%	2.73%	2.48%
Industrial	0.09%	0.06%	0.04%	0.07%	0.33%
Services	0.75%	0.53%	0.47%	0.44%	0.49%
Others	0.22%	0.18%	0.13%	0.21%	0.19%
. Inventories	0.16%	2.00%	0.04%	0.36%	0.14%
GOVERNMENT PURCHASES	15.83%	15.68%	13.59%	13.56%	14.17%
. Consumption	12.73%	12.19%	11.32%	11.03%	10.53%
. Means of production	0.47%	0.80%	0.35%	0.45%	1.09%
. Construction	2.63%	2.69%	1.91%	2.08%	2.55%
NET EXPORTS	-6.47%	-10.45%	-11.14%	-12.36%	-15.06%
. Exports goods & services	15.81%	13.24%	15.92%	14.76%	14.18%
. Imports goods & services	22.29%	23.69%	27.07%	27.12%	29.24%
GROSS DOMESTIC PRODUCT (GDP)	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Banco Central de Reserva de El Salvador, 1994

Gross Domestic Product at Constant Prices
(Thousands of Salvadoran Colones)

Expenditure:	1988	1989	1990	1991	1992
PERSONAL CONSUMPTION	19,082,541	19,745,231	21,605,490	22,321,185	23,594,702
- Durable goods	186,238	177,217	199,670	169,833	221,106
- Non-durable goods	14,372,075	14,813,965	16,263,270	14,245,774	14,879,739
- Services	4,524,228	4,754,049	5,142,549	7,905,578	8,493,857
GROSS PRIVATE INVESTMENT	2,284,812	2,818,404	2,344,714	2,880,816	3,317,925
. Fixed Investment	2,245,962	2,341,123	2,334,429	2,789,334	3,281,909
- Means of Production	1,440,024	1,534,007	1,505,539	1,909,264	2,353,568
Agriculture	45,310	49,715	60,932	78,832	95,256
Industry	449,744	419,145	484,944	629,536	758,094
Communication	692,318	766,043	699,731	939,848	1,093,857
Others	252,652	299,104	259,932	261,048	406,362
- Construction	805,938	807,116	828,890	880,070	928,341
Residential	554,578	621,552	669,713	695,666	661,964
Industrial	21,966	15,439	10,345	19,001	87,126
Services	176,848	127,280	116,542	111,657	129,451
Others	52,546	42,845	32,290	53,747	49,800
. Inventories	38,850	477,281	10,285	91,482	36,015
GOVERNMENT PURCHASES	3,732,159	3,733,741	3,336,249	3,459,114	3,781,173
. Consumption	3,001,336	2,903,282	2,780,147	2,814,046	2,809,924
. Means of production	110,778	189,406	86,226	114,219	291,666
. Construction	620,045	641,053	469,876	530,849	679,583
NET EXPORTS	(1,526,252)	(2,488,718)	(2,735,779)	(3,153,019)	(4,016,729)
. Exports goods & services	3,727,076	3,151,785	3,909,631	3,765,583	3,782,338
. Imports goods & services	5,253,328	5,640,503	6,645,410	6,918,601	7,799,067
GROSS DOMESTIC PRODUCT (GDP)	23,573,260	23,808,659	24,550,674	25,508,096	26,677,071

Source: Banco Central de Reserva de El Salvador, 1994

El Salvador's Economic Indicators							
(1987=100)							
Year	GNP(c)	CPI	Real GNP	GDP	Real GDP	GDP growth	(GDP/GNP)%
1972	2,855	6.80	19,423	2,882	19,607		100.95%
1973	3,294	6.18	20,339	3,331	20,567	4.9%	101.12%
1974	3,891	5.56	21,633	3,944	21,928	6.6%	101.36%
1975	4,412	5.16	22,764	4,478	23,105	5.4%	101.50%
1976	5,689	4.20	23,865	5,706	23,936	3.6%	100.30%
1977	7,095	3.53	25,039	7,167	25,293	5.7%	101.01%
1978	7,562	3.51	26,561	7,692	27,018	6.8%	101.72%
1979	8,547	3.10	26,406	8,607	26,591	-1.6%	100.70%
1980	8,698	2.73	23,742	8,917	24,340	-8.5%	102.52%
1981	8,396	2.59	21,740	8,646	22,387	-8.0%	102.98%
1982	8,668	2.36	20,459	8,966	21,162	-5.5%	103.44%
1983	9,825	2.10	20,622	10,152	21,308	0.7%	103.33%
1984	11,323	1.87	21,155	11,657	21,779	2.2%	102.95%
1985	14,039	1.56	21,837	14,331	22,291	2.4%	102.08%
1986	19,197	1.14	21,858	19,763	22,502	0.9%	102.95%
1987	22,527	1	22,527	23,141	23,141	2.8%	102.73%
1988	26,763	0.86	23,054	27,366	23,573	1.9%	102.25%
1989	31,624	0.74	23,361	32,230	23,809	1.0%	101.92%
1990	40,359	0.60	24,133	41,058	24,551	3.1%	101.73%
1991	47,048	0.53	25,111	47,792	25,508	3.9%	101.58%
1992	54,316	0.49	26,364	54,766	26,582	4.2%	100.83%

Source: World Tables 1994, World Bank, pp. 153,252.

APPENDIX E. SALVADORAN TRADE BALANCE

Exports/Import Analysis

Exports:	Q(tons)	1988 P($/Ton)	Value ($m)	Q(tons)	1989 P($/Ton)	Value ($m)
Coffee	148,305	2,413.9	358	94,700	2,413.9	228.6
Cotton	231	1,300.0	0.3	538	1,300.0	0.7
Sugar	42,667	450.0	19.2	30,000	450.0	13.5
Shrimps	3,433	4,660.0	16	2,146	4,660.0	10
No Traditional (CACM)	111,840	1,250.0	139.8	128,480	1,250.0	160.6
No Traditional (ROW)	60,400	1,250.0	75.5	67,280	1,250.0	84.1
Total	366,876	11,324	608.8	323,144	11,323.9	497.5
Imports:						
Food	485,095	324.6	157.5	413,711	374.6	155.0
Industrial goods	1,436,490	590.0	847.5	1,497,106	669.2	1,001.9
Total	1,921,585	914.6	1005	1,910,817	1,043.8	1,156.9

Exports:	Q(tons)	1990 P($/Ton)	Value ($m)	Q(tons)	1991 P($/Ton)	Value ($m)
Coffee	148,663	1,741.5	258.9	127,466	1,722.0	219.5
Cotton	997	1,304.4	1.3	452	1,550.0	0.7
Sugar	44,912	452.0	20.3	82,051	390.0	32
Shrimps	3,069	4,660.0	14.3	3,179	6,260.0	19.9
No Traditional (CACM)	138,733	1,247.0	173	155,520	1,245.5	193.7
No Traditional (ROW)	90,136	1,247.0	112.4	98,113	1245.5	122.2
Total	426,509	10,652	580	466,781	12,413	588
Imports:						
Food	454,972	387.4	176.2	788,009	297.9	234.7
Industrial goods	1,904,916	570.2	1,086.2	1,713,259	685.7	1,174.8
Total	2,359,888	958	1,262	2,501,268	984	1409

El Salvador Production

Production:	1988 (Tons)	1989 (Tons)	1990 (Tons)	1991 (Tons)
Coffee	120,290	121,900	147,200	143,704
Cotton	9,936	7,084	4,968	3,772
Sugar	2,736,000	2,582,000	3,197,000	3,813,000

Concept/year	1988 (M$)	1989 (M$)	1990 (M$)	1991 (M$)
Exports:				
United States	238.60	178.50	194.55	196.93
Mexico	1.50	3.39	4.62	8.13
Germany	140.64	88.50	91.16	76.10
Guatemala	91.90	102.57	100.68	108.30
Japan	27.58	14.68	6.16	15.70
ROW	108.62	109.80	185.09	183.21
Total	608.84	497.45	582.26	588.36

Imports:				
United States	376.98	461.73	537.21	558.46
Mexico	80.36	96.29	97.71	118.49
Germany	43.38	54.66	55.54	59.85
Guatemala	133.26	130.04	145.42	164.30
Japan	50.02	49.18	44.47	68.44
ROW	322.90	369.45	382.11	426.45
Total	1,006.90	1,161.34	1,262.46	1,395.99

Trade Balance	-398.06	-663.89	-680.20	-807.63

Partial T/B:

United States	-138.38	-283.23	-342.66	-361.54
Mexico	-78.86	-92.89	-93.09	-110.36
Germany	97.26	33.84	35.62	16.25
Guatemala	-41.36	-27.46	-44.74	-56.00
Japan	-22.44	-34.50	-38.32	-52.74
ROW	-214.28	-259.64	-197.01	-243.24

Trade Incidents

United States	34.76%	42.66%	50.38%	44.77%
Mexico	19.81%	13.99%	13.69%	13.67%
Germany	-24.43%	-5.10%	-5.24%	-2.01%
Guatemala	10.39%	4.14%	6.58%	6.93%
Japan	5.64%	5.20%	5.63%	6.53%
ROW	53.83%	39.11%	28.96%	30.12%
Total	100.00%	100.00%	100.00%	100.00%

Concept/year	1988 %	1989 %	1990 %	1991 %
Exports:				
United States	39.19	35.88	33.41	33.47
Mexico	0.25	0.68	0.79	1.38
Germany	23.10	17.79	15.66	12.93
Guatemala	15.09	20.62	17.29	18.41
Japan	4.53	2.95	1.06	2.67
ROW	17.84	22.07	31.79	31.14
Total	100.00	100.00	100.00	100.00

Imports:				
United States	37.44	39.76	42.55	40
Mexico	7.98	8.29	7.74	8.49
Germany	4.31	4.71	4.40	4.29
Guatemala	13.23	11.2	11.52	11.77
Japan	4.97	4.23	3.52	4.9
ROW	32.07	31.81	30.27	30.55
Total	100.00	100.00	100.00	100.00

El Salvador Exchange Rates 1978-1995						
Year	**Rate (Cols/$)**	**Parallel Market (Cols/$)**	**Minimum Wage (Cols)**	**Relative Increase**	**Minimum Wage ($)**	**Real Increase**
1978	2.50	3.50	4.25		1.21	
1979	5.00	5.50	5.20	0.22	0.95	-0.22
1980	5.00	5.50	5.20		0.95	
1981	5.00	5.60	5.20		0.93	
1982	5.00	5.60	5.20		0.93	
1983	5.00	5.30	5.20		0.98	
1984	5.00	5.30	5.20		0.98	
1985	5.00	5.30	5.20		0.98	
1986	5.00	7.50	8.00	0.54	1.07	0.09
1987	5.00	7.50	8.00		1.07	
1988	5.00	7.50	10.00	0.25	1.33	0.25
1989	5.60	7.50	10.00		1.33	
1990	7.60	8.25	11.50	0.15	1.39	0.05
1991	8.00	8.55	13.00	0.13	1.52	0.09
1992	8.50	8.46	13.00		1.54	
1993	8.78	8.77	14.00	0.03	1.60	0.04
1994	8.78	8.78	16.50	0.18	1.88	0.18
1995	8.78	8.78	16.50		1.88	

Source: El Salvador Ministry of Planning, Economic, and Social Indicators.

Economic Activity	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Agricultural Sector										
General Rate	5.2	5.2	5.2	8	8	10	10	11.5	13	13
Women, Under16 Years of Age, Disabled	4.6	4.6	4.6	7	7	9	9	10.5	12	12
Harvest Gathering										
Coffee										
Per Arroba	2.85	2.85	2.85	2.85	2.85	3.25	3.25	3.9	3.9	3.9
Per Day	14.3	14.3	14.3	14.3	14.3	16.3	16.3	19.5	19.5	19.5
Sugar										
Per Ton	5.75	5.75	5.75	5.75	5.75	6.75	6.75	8.1	8.1	8.1
Per Day	11.5	11.5	11.5	11.5	11.5	13.5	13.5	16.2	16.2	16.2
Cotton										
Per Pound	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.14	0.14	0.14
Per Day	10.5	10.5	10.5	10.5	10.5	12	12	14.4	14.4	14.4
Seasonal Agriculture										
General Rates										
Coffee Plants	14	14	14	14	14	17	17	20.4	20.4	20.4
Sugar Refineries	8	8	8	8	8	11	11	13.2	13.2	13.2
Cotton Plants	8	8	8	8	8	11	11	13.2	13.2	13.2
Manufacturing and Services										
Metropolitan Zone	11	13	13	15	15	18	18	21	23.5	27
Other Municipalities	10	11.9	11.9	14	14	17	17	20	22.5	26

Note: The salaries are related to an 8 hour work day (40 hour work week). An arroba is equivalent to 25 pounds.
Source: Salvadoran Ministry of Labor and Welfare.

APPENDIX F. TURNOVER IN SALVADORAN EDUCATIONAL INSTITUTIONS

Level of Education	1983	1984	1985	1986	1987	1988	1989	1990	1991
1st Grade									
Enrollment	229.2	229.4	239.6	245.5	238.4	237.5	236.7	214.8	217.3
Graduated	152	158.2	165	167	162.4	158.3	148	153.1	
Turnover	34%	31%	31%	32%	32%	33%	37%	29%	
2nd Grade									
Enrollment	141.8	152	158.2	165	167	162.4	158.3	148	153.1
Graduated	119.1	130.7	137.5	138.4	136.6	134.7	127.5	133.1	
Turnover	16%	14%	13%	16%	18%	17%	19%	10%	
3rd Grade									
Enrollment	110.7	119.1	130.7	137.5	138.4	136.6	134.7	127.5	133.1
Graduated	95.4	105.4	115.4	117.7	118.1	118.5	110.3	121.5	
Turnover	14%	12%	12%	14%	15%	13%	18%	5%	
4th Grade									
Enrollment	84.2	95.4	105.4	115.4	117.7	118.1	118.5	110.3	121.5
Graduated	72.3	84.1	92.6	97.2	98.7	100.2	96.3	100.4	
Turnover	14%	12%	12%	16%	16%	15%	19%	9%	
5th Grade									
Enrollment	71.8	72.3	84.1	92.6	97.2	98.7	100.2	96.3	100.4
Graduated	61.8	64.3	74.9	80.3	82.5	84.7	82.7	89.4	
Turnover	14%	11%	11%	13%	15%	14%	17%	7%	
6th Grade									
Enrollment	63	61.8	64.3	74.9	80.3	82.5	84.7	82.7	89.4
Graduated	59.2	60.2	63.5	69.3	71.2	72.9	71.9	74.8	
Turnover	6%	3%	1%	7%	11%	12%	15%	10%	
7th Grade									
Enrollment	58.6	59.2	60.2	63.5	69.3	71.2	72.9	71.9	74.8
Graduated	49.8	51.3	54.6	55.1	57.3	59.6	60.8	62.9	
Turnover	15%	13%	9%	13%	17%	16%	17%	13%	
8th Grade									
Enrollment	49.8	49.8	51.3	54.6	55.1	57.3	59.6	60.8	62.9
Graduated	44.2	46.2	48.8	48.9	49.6	50.4	51.8	54.9	
Turnover	11%	7%	5%	10%	10%	12%	13%	10%	
9th Grade									
Enrollment	42.8	44.2	46.2	48.8	48.9	49.6	50.4	51.8	54.9
Graduated									
Turnover									

Level of Education	1983	1984	1985	1986	1987	1988	1989	1990	1991
1st Grade									
Enrollment	116.7	122.9	130.5	133.9	131.4	133.2	135	120.8	122.6
Graduated	74.9	80.1	82.1	85.1	83.3	81.6	74.9	78	
Turnover	36%	35%	37%	36%	37%	39%	45%	35%	
2nd Grade									
Enrollment	64.4	74.9	80.1	82.1	85.1	83.3	81.6	74.9	78
Graduated	50.3	57.4	61.2	60.9	61.3	61.6	57.9	59.9	
Turnover	22%	23%	24%	26%	28%	26%	29%	20%	
3rd Grade									
Enrollment	43.2	50.3	57.4	61.2	60.9	61.3	61.6	57.9	59.9
Graduated	35.7	40.6	45.1	37.7	48.4	49.1	45	47	
Turnover	17%	19%	21%	38%	21%	20%	27%	19%	
4th Grade									
Enrollment	30.2	35.7	40.6	45.1	37.7	48.4	49.1	45	47
Graduated	24.1	28	30.8	33.2	34.8	36.4	34.2	35.9	
Turnover	20%	22%	24%	26%	8%	25%	30%	20%	
5th Grade									
Enrollment	23	24.1	28	30.8	33.2	34.8	36.4	34.2	35.9
Graduated	18.8	19.1	22.1	24.2	26.1	27.9	26.6	28.6	
Turnover	18%	21%	21%	21%	21%	20%	27%	16%	
6th Grade									
Enrollment	18.6	18.8	19.1	22.1	24.2	26.1	27.9	26.6	28.6
Graduated	11.5	11.8	11.5	13.2	14.5	16.1	16.2	17.8	
Turnover	38%	37%	40%	40%	40%	38%	42%	33%	
7th Grade									
Enrollment	11	11.5	11.8	11.5	13.2	14.5	16.1	16.2	17.8
Graduated	8.7	8.9	8.9	9.4	10.4	11.3	12	13.4	
Turnover	21%	23%	25%	18%	21%	22%	25%	17%	
8th Grade									
Enrollment	8.4	8.7	8.9	8.9	9.4	10.4	11.3	12	13.4
Graduated	6.7	7.3	7.1	7.4	8	8.6	8.9	10.4	
Turnover	20%	16%	20%	17%	15%	17%	21%	13%	
9th Grade									
Enrollment	6.2	6.7	7.3	7.1	7.4	8	8.6	8.9	10.4
Graduated									
Turnover									

High School

Courses	1983	1984	1985	1986	1987	1988	1989	1990
1st Course								
Enrollment	17,186	17,340	18,253	18,246	19,438	19,103	16,737	14,293
Graduated	15,829	15,059	16,159	16,231	15,834	14,480	12,630	
Turnover	8%	13%	11%	11%	19%	24%	25%	
2nd Course								
Enrollment	13,077	15,829	15,059	16,159	16,231	15,834	14,480	12630
Graduated	12,444	12,890	13,821	15,075	14,121	12,744	11,828	
Turnover	5%	19%	8%	7%	13%	20%	18%	
3rd Course								
Enrollment	10,549	12,444	12,890	13,821	15,075	14,121	12,744	11,828
Graduated								
Turnover								

Junior Colleges

	1983	1984	1985	1986	1987	1988	1989	1990
Enrollment	10,433	9,775	9,590	7,926	7,949	5,923	5,651	5,802

Universities

	1983	1984	1985	1986	1987	1988	1989	1990
Enrollment	46976	53456	60994	65595	70501	71846	75167	72809

INITIAL DISTRIBUTION LIST

No. Copies

1. Defense Technical Information Center 2
   8725 John J Kingman Rd., STE 0944
   Ft. Belvoir, VA 22060-6218

2. Dudley Knox Library 2
   Naval Postgraduate School
   411 Dyer Rd.
   Monterey, CA 93943-5101

3. Professor Robert E. Looney, Code NS/Lx 1
   Department of National Security Affairs
   Naval Postgraduate School
   Monterey, CA 93943-5000

4. Professor Bill Gates, Code SM/Ed 1
   Department of Systems Management
   Naval Postgraduate School
   Monterey, CA 93943-5000

5. Edgard F. Tovar 2
   Avenida Las Leñitas #16-E
   Jardines de la Hacienda
   Ciudad Merliot
   Nva. San Salvador
   El Salvador, CA

DUDLEY KNOX LIBRARY
NAVAL POSTGRADUATE SCHOOL
MONTEREY CA 93943-5101

DUDLEY KNOX LIBRARY
3 2768 00323859 3